STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

Division of Facilities Construction and Management

DFCM

STANDARD LOW BID PROJECT
Project Budgets Over $100,000

July 23, 2008

WHITE ROCKS FISH HATCHERY RESIDENCES

DIVISION OF WILDLIFE RESOURCES

UINTAH COUNTY, UTAH

DFCM Project Number: 08206520

P+A Architects
821 Kensington Ave.
Salt Lake City, Utah 84105

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Current copies of the following documents are hereby made part of these contract documents by reference. These documents are available on the DFCM web site at http://dfcm.utah.gov or are available upon request from DFCM.

DFCM Supplemental General Conditions dated May 5, 2008
DFCM General Conditions dated May 25, 2005.
DFCM Application and Certification for Payment dated May 25, 2005.

Technical Specifications :
Drawings:

The Agreement and General Conditions dated May 25, 2005 have been updated from versions that were formally adopted and in use prior to this date. The changes made to the General Conditions are identified in a document entitled Revisions to General Conditions that is available on DFCM's web site at http://dfcm.utah.gov

NOTICE TO CONTRACTORS

Sealed bids will be received by the Division of Facilities Construction and Management (DFCM) for:

WHITE ROCKS FISH HATCHERY RESIDENCES
DIVISION OF WILDLIFE RESOURCES – UINTAH COUNTY, UTAH
DFCM PROJECT NO: 08206520

Bids will be in accordance with the Contract Documents that will be available on **Wednesday, July 23, 2008,** and distributed in electronic format only on CDs from DFCM, 4110 State Office Building, Salt Lake City, Utah and on the DFCM web page at http://dfcm.utah.gov. For questions regarding this project, please contact Vic Middleton, DFCM, at 801-971-0504. No others are to be contacted regarding this bidding process. The construction estimate for this project is $450,000.00.

A **mandatory** pre-bid meeting will be held at **11:00am** on **Tuesday, July 29, 2008** at White Rocks Fish Hatchery. All bidders wishing to bid on this project are required to attend this meeting.

Bids will be received until the hour of **3:00 PM** on **Wednesday, August 6, 2008** at DFCM, 4ll0 State Office Building, Salt Lake City, Utah 84114. Bids will be opened and read aloud in the DFCM Conference Room, 4110 State Office Building, Salt Lake City, Utah. NOTE: Bids must be received at 4110 State Office Building by the specified time.

A bid bond in the amount of five percent (5%) of the bid amount, made payable to the Division of Facilities Construction and Management on DFCM's bid bond form, shall accompany the bid.

The Division of Facilities Construction and Management reserves the right to reject any or all bids or to waive any formality or technicality in any bid in the interest of DFCM.

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
Joanna Reese, Contract Coordinator
4110 State Office Building, Salt Lake City, Utah 84114

PROJECT DESCRIPTION

Construction of two new residential dwelings located at the White Rocks Fish Hatchery Uintah County. They are both approximately 1600 SF with two bedrooms, two baths', kitchen, and front room and laundry facility. They have a full basement (unfinished). They will need septic facilities; water and power are close to site. Roof is a metal with exterior siding/stucco. They are to be finished and ready for occupancy this fall.

PROJECT SCHEDULE

PROJECT NAME: White Rocks Fish Hatchery Residences – Division of Wildlife Resources Uintah County, Utah
DFCM PROJECT NO. 08206520

Event	Day	Date	Time	Place
Bidding Documents Available	Wednesday	July 23, 2008	12:00 Noon	DFCM 4110 State Office Bldg SLC, UT and the DFCM web site *
Mandatory Pre-bid Site Meeting	Tuesday	July 29, 2008	11:00am	White Rocks Fish Hatchery
Last Day to Submit Questions	Thursday	July 31, 2008	3:00pm	Vic Middleton– DFCM E-mail vmiddlet@utah.gov Fax 801-538-3267
Addendum Deadline (exception for bid delays)	Friday	August 1, 2008	3:00 pm	DFCM web site *
Prime Contractors Turn In Bid and Bid Bond	Wednesday	August 6. 2008	3:00pm	DFCM 4110 State Office Bldg SLC, UT
Sub-contractor List Due	Thursday	August 7, 2008	3:00pm	DFCM 4110 State Office Bldg SLC, UT Fax 801-538-3677
Substantial Completion Date	Thursday	November 20, 2008		

* **NOTE: DFCM's web site address is http://dfcm.utah.gov**

BID FORM

NAME OF BIDDER _____ DATE _____

To the Division of Facilities Construction and Management
4110 State Office Building
Salt Lake City, Utah 84114

The undersigned, responsive to the "Notice to Contractors" and in accordance with the "Instructions to Bidders", in compliance with your invitation for bids for the **White Rocks Fish Hatchery Residences – Division of Wildlife Resources – Uintah County, Utah - DFCM Project No. 08206520** and having examined the Contract Documents and the site of the proposed Work and being familiar with all of the conditions surrounding the construction of the proposed Project, including the availability of labor, hereby proposes to furnish all labor, materials and supplies as required for the Work in accordance with the Contract Documents as specified and within the time set forth and at the price stated below. This price is to cover all expenses incurred in performing the Work required under the Contract Documents of which this bid is a part:

I/We acknowledge receipt of the following Addenda: _____

For all work shown on the Drawings and described in the Specifications and Contract Documents, I/we agree to perform for the sum of:

_____ DOLLARS ($_____)
(In case of discrepancy, written amount shall govern)

I/We guarantee that the Work will be Substantially Complete by November 20, 2008, should I/we be the successful bidder, and agree to pay liquidated damages in the amount of **$200.00** per day for each day after expiration of the Contract Time as stated in Article 3 of the Contractor's Agreement.

This bid shall be good for 45 days after bid opening.

Enclosed is a 5% bid bond, as required, in the sum of _____

The undersigned Contractor's License Number for Utah is _____._____

Upon receipt of notice of award of this bid, the undersigned agrees to execute the contract within ten (10) days, unless a shorter time is specified in the Contract Documents, and deliver acceptable Performance and Payment bonds in the prescribed form in the amount of 100% of the Contract Sum for faithful performance of the contract.

The Bid Bond attached, in the amount not less than five percent (5%) of the above bid sum, shall become the property of the Division of Facilities Construction and Management as liquidated damages for delay and additional expense caused thereby in the event that the contract is not executed and/or acceptable l00% Performance and Payment bonds are not delivered within the time set forth.

Type of Organization:

_____
(Corporation, Partnership, Individual, etc.)

Any request and information related to Utah Preference Laws:

_____

Respectfully submitted,

_____
Name of Bidder

ADDRESS:

_____

_____

_____
Authorized Signature

INSTRUCTIONS TO BIDDERS

1. Drawings and Specifications, Other Contract Documents

Drawings and Specifications, as well as other available Contract Documents, may be obtained as stated in the Invitation to Bid.

2. Bids

Before submitting a bid, each contractor shall carefully examine the Contract Documents, shall visit the site of the Work; shall fully inform themselves as to all existing conditions and limitations; and shall include in the bid the cost of all items required by the Contract Documents. If the bidder observes that portions of the Contract Documents are at variance with applicable laws, building codes, rules, regulations or contain obvious erroneous or uncoordinated information, the bidder shall promptly notify the DFCM Representative and the necessary changes shall be accomplished by Addendum.

The bid, bearing original signatures, must be typed or handwritten in ink on the Bid Form provided in the procurement documents and submitted in a sealed envelope at the location specified by the Invitation to Bid prior to the deadline for submission of bids.

Bid bond security, in the amount of five percent (5%) of the bid, made payable to the Division of Facilities Construction and Management, shall accompany bid. THE BID BOND MUST BE ON THE BID BOND FORM PROVIDED IN THE PROCUREMENT DOCUMENTS IN ORDER TO BE CONSIDERED AN ACCEPTABLE BID.

If the bid bond security is submitted on a bid bond form other than DFCM's required bid bond form, and the bid security meets all other legal requirements, the bidder will be allowed to provide an acceptable bid bond by the close of business on the next business day following notification by DFCM of submission of a defective bid bond security. **NOTE: A cashier's check cannot be used as a substitute for a bid bond.**

3. Contract and Bond

The Contractor's Agreement will be in the form found in the specifications. The Contract Time will be as indicated in the bid. The successful bidder, simultaneously with the execution of the Contract Agreement, will be required to furnish a performance bond and a payment bond, both bearing original signatures, upon the forms provided in the procurement documents. The performance and payment bonds shall be for an amount equal to one hundred percent (100%) of the contract sum and secured from a company that meets the requirements specified in the requisite forms. Any bonding requirements for subcontractors will be specified in the Supplementary General Conditions.

4. Listing of Subcontractors

Listing of Subcontractors shall be as summarized in the "Instructions and Subcontractor's List Form", which are included as part of these Contract Documents. The Subcontractors List shall be delivered to DFCM or faxed to DFCM at (801)538-3677 within 24 hours of the bid opening. Requirements for listing additional subcontractors will be listed in the Contract Documents.

DFCM retains the right to audit or take other steps necessary to confirm compliance with requirements for the listing and changing of subcontractors. Any contractor who is found to not be in compliance with these requirements is subject to a debarment hearing and may be debarred from consideration for award of contracts for a period of up to three years.

5. Interpretation of Drawings and Specifications

If any person or entity contemplating submitting a bid is in doubt as to the meaning of any part of the drawings, specifications or other Contract Documents, such person shall submit to the DFCM Project Manager a request for an interpretation thereof. The person or entity submitting the request will be responsible for its prompt delivery. Any interpretation of the proposed documents will be made only by addenda posted on DFCM's web site at http://dfcm.utah.gov. Neither the DFCM nor A/E will be responsible for any other explanations or interpretations of the proposed documents. A/E shall be deemed to refer to the architect or engineer hired by DFCM as the A/E or Consultant for the Project.

6. Addenda

Addenda will be posted on DFCM's web site at http://dfcm.utah.gov. Contractors are responsible for obtaining information contained in each addendum from the web site. Addenda issued prior to the submittal deadline shall become part of the bidding process and must be acknowledged on the bid form. Failure to acknowledge addenda may result in disqualification from bidding.

7. Award of Contract

The Contract will be awarded as soon as possible to the lowest, responsive and responsible bidder, based on the lowest combination of base bid and acceptable prioritized alternates, provided the bid is reasonable, is in the interests of the State of Utah to accept and after applying the Utah Preference Laws in U.C.A. Title 63, Chapter 56. DFCM reserves the right to waive any technicalities or formalities in any bid or in the bidding. Alternates will be accepted on a prioritized basis with Alternate 1 being highest priority, Alternate 2 having second priority, etc.

8. DFCM Contractor Performance Rating

As a contractor completes each DFCM project, DFCM, the architect/engineer and the using agency will evaluate project performance based on the enclosed "DFCM Contractor Performance Rating" form. The ratings issued on this project will not affect this project but may affect the award on future projects.

9. Licensure

The Contractor shall comply with and require all of its subcontractors to comply with the license laws as required by the State of Utah.

10. Permits

In concurrence with the requirements for permitting in the General Conditions, it is the responsibility of the Contractor to obtain the fugitive dust plan requirements from the Utah Division of Air Quality and the SWPPP requirements from the Utah Department of Environmental Quality and submit the completed forms and pay any permit fee that may be required for this specific project. Failure to obtain the required permit may result in work stoppage and/or fines from the regulating authority that will be the sole responsibility of the Contractor. Any delay to the project as a result of any such failure to obtain the permit or noncompliance with the permit shall not be eligible for any extension in the Contract Time.

11. Right to Reject Bids

DFCM reserves the right to reject any or all Bids.

12. Time is of the Essence

Time is of the essence in regard to all the requirements of the Contract Documents.

13. Withdrawal of Bids

Bids may be withdrawn on written request received from bidder prior to the time fixed for opening. Negligence on the part of the bidder in preparing the bid confers no right for the withdrawal of the bid after it has been opened.

14. Product Approvals

Where reference is made to one or more proprietary products in the Contract Documents, but restrictive descriptive materials of one or more manufacturer(s) is referred to in the Contract Documents, the products of other manufacturers will be accepted, provided they equal or exceed the standards set forth in the drawings and specifications and are compatible with the intent and purpose of

the design, subject to the written approval of the A/E. Such written approval must occur prior to the deadline established for the last scheduled addenda to be issued. The A/E's written approval will be in an issued addendum. If the descriptive material is not restrictive, the products of other manufacturers specified will be accepted without prior approval provided they are compatible with the intent and purpose of the design as determined by the A/E.

15. Financial Responsibility of Contractors, Subcontractors and Sub-subcontractors

Contractors shall respond promptly to any inquiry in writing by DFCM to any concern of financial responsibility of the contractor, subcontractor or sub-subcontractor.

16. Debarment

By submitting a bid, the Contractor certifies that neither it nor its principals, including project and site managers, have been, or are under consideration for, debarment or suspension, or any action that would exclude such from participation in a construction contract by any governmental department or agency. If the Contractor cannot certify this statement, attach to the bid a detailed written explanation which must be reviewed and approved by DFCM as part of the requirements for award of the Project.

BID BOND

(Title 63, Chapter 56, U. C. A. l953, as Amended)

KNOW ALL PERSONS BY THESE PRESENTS:

That _____ hereinafter referred to as the "Principal," and_____, a corporation organized and existing under the laws of the State of _____, with its principal office in the City of _____ and authorized to transact business in this State and U. S. Department of the Treasury Listed, (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies); hereinafter referred to as the "Surety," are held and firmly bound unto the STATE OF UTAH, hereinafter referred to as the "Obligee," in the amount of $_____ (5% of the accompanying bid), being the sum of this Bond to which payment the Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted to Obligee the accompanying bid incorporated by reference herein, dated as shown, to enter into a contract in writing for the_____ _____ Project.

NOW, THEREFORE, THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that if the said principal does not execute a contract and give bond to be approved by the Obligee for the faithful performance thereof within ten (10) days after being notified in writing of such contract to the principal, then the sum of the amount stated above will be forfeited to the State of Utah as liquidated damages and not as a penalty; if the said principal shall execute a contract and give bond to be approved by the Obligee for the faithful performance thereof within ten (10) days after being notified in writing of such contract to the Principal, then this obligation shall be null and void. It is expressly understood and agreed that the liability of the Surety for any and all defaults of the Principal hereunder shall be the full penal sum of this Bond. The Surety, for value received, hereby stipulates and agrees that obligations of the Surety under this Bond shall be for a term of sixty (60) days from actual date of the bid opening.

PROVIDED, HOWEVER, that this Bond is executed pursuant to provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as amended, and all liabilities on this Bond shall be determined in accordance with said provisions to same extent as if it were copied at length herein.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their several seals on the date indicated below, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

DATED this _____ day of _____, 20_____ .

Principal's name and address (if other than a corporation):

_____

_____

By:_____

Title: _____

Principal's name and address (if a corporation):

_____

_____

By:_____

Title: _____

(Affix Corporate Seal)

Surety's name and address:

_____

_____

By: _____

Attorney-in-Fact (Affix Corporate Seal)

STATE OF _____)
) ss.
COUNTY OF _____)

On this ____ day of _____, 20____, personally appeared before me _____, whose identity is personally known to me or proved to me on the basis of satisfactory evidence, and who, being by me duly sworn, did say that he/she is the Attorney-in-fact of the above-named Surety Company, and that he/she is duly authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations, and that he/she acknowledged to me that as Attorney-in-fact executed the same.

Subscribed and sworn to before me this _____ day of _____, 20_____.
My Commission Expires: _____
Resides at: _____

_____
NOTARY PUBLIC

Agency: _____
Agent: _____
Address: _____
Phone: _____

Approved As To Form: May 25, 2005
By Alan S. Bachman, Asst Attorney General

INSTRUCTIONS AND SUBCONTRACTORS LIST FORM

The three low bidders, as well as all other bidders that desire to be considered, are required by law to submit to DFCM within 24 hours of bid opening a list of **ALL** first-tier subcontractors, including the subcontractor's name, bid amount and other information required by Building Board Rule and as stated in these Contract Documents, based on the following:

DOLLAR AMOUNTS FOR LISTING

PROJECTS UNDER $500,000: ALL FIRST-TIER SUBS $20,000 OR OVER MUST BE LISTED
PROJECTS $500,000 OR MORE: ALL FIRST-TIER SUBS $35,000 OR OVER MUST BE LISTED

- Any additional subcontractors identified in the bid documents shall also be listed.
- The DFCM Director may not consider any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of State law.
- List subcontractors for base bid as well as the impact on the list that the selection of any alternate may have.
- Bidder may not list more than one subcontractor to perform the same work.
- If there are no subcontractors for the job that are required to be reported by State law (either because there are no subcontractors that will be used on the project or because there are no first-tier subcontractors over the dollar amounts referred to above), then you do not need to submit a sublist. If you do not submit a sublist, it will be deemed to be a representation by you that there are no subcontractors on the job that are required to be reported under State law. At any time, DFCM reserves the right to inquire, for security purposes, as to the identification of the subcontractors at any tier that will be on the worksite.

LICENSURE:

The subcontractor's name, the type of work, the subcontractor's bid amount, and the subcontractor's license number as issued by DOPL, if such license is required under Utah Law, shall be listed. Bidder shall certify that all subcontractors, required to be licensed, are licensed as required by State law. A subcontractor includes a trade contractor or specialty contractor and does not include suppliers who provide only materials, equipment, or supplies to a contractor or subcontractor.

'SPECIAL EXCEPTION':

A bidder may list 'Special Exception' in place of a subcontractor when the bidder intends to obtain a subcontractor to perform the work at a later date because the bidder was unable to obtain a qualified or reasonable bid under the provisions of U.C.A.Section 63A-5-208(4). The bidder shall insert the term 'Special Exception' for that category of work, and shall provide documentation with the subcontractor list describing the bidder's efforts to obtain a bid of a qualified subcontractor at a reasonable cost and why the bidder was unable to obtain a qualified subcontractor bid. The Director must find that the bidder complied in good faith with State law requirements for any 'Special Exception' designation, in order for the bid to be considered. If awarded the contract, the Director shall supervise the bidder's efforts to obtain a qualified subcontractor bid. The amount of the awarded contract may not be adjusted to reflect the actual amount of the subcontractor's bid. Any listing of 'Special Exception' on the sublist form shall also include amount allocated for that work.

GROUNDS FOR DISQUALIFICATION:

The Director may not consider any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of State law. Director may withhold awarding the contract to a particular bidder if one or more of the proposed subcontractors are considered by the Director to be unqualified to do the Work or for

such other reason in the best interest of the State of Utah. Notwithstanding any other provision in these instructions, if there is a good faith error on the sublist form, at the sole discretion of the Director, the Director may provide notice to the contractor and the contractor shall have 24 hours to submit the correction to the Director. If such correction is submitted timely, then the sublist requirements shall be considered met.

CHANGES OF SUBCONTRACTORS SPECIFICALLY IDENTIFIED ON SUBLIST FORM:

Subsequent to twenty-four hours after the bid opening, the contractor may change its listed subcontractors only after receiving written permission from the Director based on complying with all of the following criteria.

(1) The contractor has established in writing that the change is in the best interest of the State and that the contractor establishes an appropriate reason for the change, which may include, but not is not limited to, the following reasons: the original subcontractor has failed to perform, or is not qualified or capable of performing, and/or the subcontractor has requested in writing to be released.
(2) The circumstances related to the request for the change do not indicate any bad faith in the original listing of the subcontractors.
(3) Any requirement set forth by the Director to ensure that the process used to select a new subcontractor does not give rise to bid shopping.
(4) Any increase in the cost of the subject subcontractor work is borne by the contractor.
(5) Any decrease in the cost of the subject subcontractor work shall result in a deductive change order being issued for the contract for such decreased amount.
(6) The Director will give substantial weight to whether the subcontractor has consented in writing to being removed unless the Contractor establishes that the subcontractor is not qualified for the work.

EXAMPLE:

Example of a list where there are only four subcontractors:

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONTRACTOR LICENSE #
ELECTRICAL	ABCD Electric Inc.	$350,000.00	123456789000
LANDSCAPING	"Self" *	$300,000.00	123456789000
CONCRETE (ALTERNATE #1)	XYZ Concrete Inc	$298,000.00	987654321000
MECHANICAL	"Special Exception" (attach documentation)	Fixed at: $350,000.00	(TO BE PROVIDED AFTER OBTAINING SUBCONTRACTOR)

* Bidders may list "self", but it is not required.

PURSUANT TO STATE LAW - SUBCONTRACTOR BID AMOUNTS CONTAINED IN THIS SUBCONTRACTOR LIST SHALL NOT BE DISCLOSED UNTIL THE CONTRACT HAS BEEN AWARDED.

SUBCONTRACTORS LIST

FAX TO 801-538-3677

PROJECT TITLE: _____

Caution: You must read and comply fully with instructions.

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONT. LICENSE #

We certify that:

1. This list includes all subcontractors as required by the instructions, including those related to the base bid as well as any alternates.
2. We have listed "Self" or "Special Exception" in accordance with the instructions.
3. All subcontractors are appropriately licensed as required by State law.

FIRM: _____

DATE: _____ SIGNED BY: _____

NOTICE: FAILURE TO SUBMIT THIS FORM, PROPERLY COMPLETED AND SIGNED, AS REQUIRED IN THESE CONTRACT DOCUMENTS, SHALL BE GROUNDS FOR OWNER'S REFUSAL TO ENTER INTO A WRITTEN CONTRACT WITH BIDDER. ACTION MAY BE TAKEN AGAINST BIDDERS BID BOND AS DEEMED APPROPRIATE BY OWNER. ATTACH A SECOND PAGE IF NECESSARY.

CONTRACTOR'S AGREEMENT

FOR:

_____
_____
_____

THIS CONTRACTOR'S AGREEMENT, made and entered into this ____ day of _____, 20__, by and between the DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT, hereinafter referred to as "DFCM", and _____, incorporated in the State of _____ and authorized to do business in the State of Utah, hereinafter referred to as "Contractor", whose address is _____.

WITNESSETH: WHEREAS, DFCM intends to have Work performed at _____ _____.

WHEREAS, Contractor agrees to perform the Work for the sum stated herein.

NOW, THEREFORE, DFCM and Contractor for the consideration provided in this Contractor's Agreement, agree as follows:

ARTICLE 1. SCOPE OF WORK. The Work to be performed shall be in accordance with the Contract Documents prepared by _____ and entitled "_____."

The DFCM General Conditions ("General Conditions") dated May 25, 2005 and Supplemental General Conditions dated July 15, 2008 ("also referred to as General Conditions") on file at the office of DFCM and available on the DFCM website, are hereby incorporated by reference as part of this Agreement and are included in the specifications for this Project. All terms used in this Contractor's Agreement shall be as defined in the Contract Documents, and in particular, the General Conditions.

The Contractor Agrees to furnish labor, materials and equipment to complete the Work as required in the Contract Documents which are hereby incorporated by reference. It is understood and agreed by the parties hereto that all Work shall be performed as required in the Contract Documents and shall be subject to inspection and approval of DFCM or its authorized representative. The relationship of the Contractor to the DFCM hereunder is that of an independent Contractor.

ARTICLE 2. CONTRACT SUM. The DFCM agrees to pay and the Contractor agrees to accept in full performance of this Contractor's Agreement, the sum of _____ _____ DOLLARS AND NO CENTS ($_____.00), which is the base bid, and which sum also includes the cost of a 100% Performance Bond and a 100%

Payment Bond as well as all insurance requirements of the Contractor. Said bonds have already been posted by the Contractor pursuant to State law. The required proof of insurance certificates have been delivered to DFCM in accordance with the General Conditions before the execution of this Contractor's Agreement.

ARTICLE 3. TIME OF COMPLETION AND DELAY REMEDY. The Work shall be Substantially Complete by _____. Contractor agrees to pay liquidated damages in the amount of $_____ per day for each day after expiration of the Contract Time until the Contractor achieves Substantial Completion in accordance with the Contract Documents, if Contractor's delay makes the damages applicable. The provision for liquidated damages is: (a) to compensate the DFCM for delay only; (b) is provided for herein because actual damages can not be readily ascertained at the time of execution of this Contractor's Agreement; (c) is not a penalty; and (d) shall not prevent the DFCM from maintaining Claims for other non-delay damages, such as costs to complete or remedy defective Work.

No action shall be maintained by the Contractor, including its or Subcontractor or suppliers at any tier, against the DFCM or State of Utah for damages or other claims due to losses attributable to hindrances or delays from any cause whatsoever, including acts and omissions of the DFCM or its officers, employees or agents, except as expressly provided in the General Conditions. The Contractor may receive a written extension of time, signed by the DFCM, in which to complete the Work under this Contractor's Agreement in accordance with the General Conditions.

ARTICLE 4. CONTRACT DOCUMENTS. The Contract Documents consist of this Contractor's Agreement, the Conditions of the Contract (DFCM General Conditions, Supplementary and other Conditions), the Drawings, Specifications, Addenda and Modifications. The Contract Documents shall also include the bidding documents, including the Invitation to Bid, Instructions to Bidders/ Proposers and the Bid/Proposal, to the extent not in conflict therewith and other documents and oral presentations that are documented as an attachment to the contract.

All such documents are hereby incorporated by reference herein. Any reference in this Contractor's Agreement to certain provisions of the Contract Documents shall in no way be construed as to lessen the importance or applicability of any other provisions of the Contract Documents.

ARTICLE 5. PAYMENT. The DFCM agrees to pay the Contractor from time to time as the Work progresses, but not more than once each month after the date of Notice to Proceed, and only upon Certificate of the A/E for Work performed during the preceding calendar month, ninety-five percent (95%) of the value of the labor performed and ninety-five percent (95%) of the value of materials furnished in place or on the site. The Contractor agrees to furnish to the DFCM invoices for materials purchased and on the site but not installed, for which the Contractor requests payment and agrees to

safeguard and protect such equipment or materials and is responsible for safekeeping thereof and if such be stolen, lost or destroyed, to replace same.

Such evidence of labor performed and materials furnished as the DFCM may reasonably require shall be supplied by the Contractor at the time of request for Certificate of Payment on account. Materials for which payment has been made cannot be removed from the job site without DFCM's written approval. Five percent (5%) of the earned amount shall be retained from each monthly payment. The retainage, including any additional retainage imposed and the release of any retainage, shall be in accordance with UCA 13-8-5 as amended. Contractor shall also comply with the requirements of UCA 13-8-5, including restrictions of retainage regarding subcontractors and the distribution of interest earned on the retention proceeds. The DFCM shall not be responsible for enforcing the Contractor's obligations under State law in fulfilling the retention law requirements with subcontractors at any tier.

ARTICLE 6. INDEBTEDNESS. Before final payment is made, the Contractor must submit evidence satisfactory to the DFCM that all payrolls, materials bills, subcontracts at any tier and outstanding indebtedness in connection with the Work have been properly paid. Final Payment will be made after receipt of said evidence, final acceptance of the Work by the DFCM as well as compliance with the applicable provisions of the General Conditions.

Contractor shall respond immediately to any inquiry in writing by DFCM as to any concern of financial responsibility and DFCM reserves the right to request any waivers, releases or bonds from Contractor in regard to any rights of Subcontractors (including suppliers) at any tier or any third parties prior to any payment by DFCM to Contractor.

ARTICLE 7. ADDITIONAL WORK. It is understood and agreed by the parties hereto that no money will be paid to the Contractor for additional labor or materials furnished unless a new contract in writing or a Modification hereof in accordance with the General Conditions and the Contract Documents for such additional labor or materials has been executed. The DFCM specifically reserves the right to modify or amend this Contractor's Agreement and the total sum due hereunder either by enlarging or restricting the scope of the Work.

ARTICLE 8. INSPECTIONS. The Work shall be inspected for acceptance in accordance with the General Conditions.

ARTICLE 9. DISPUTES. Any dispute, PRE or Claim between the parties shall be subject to the provisions of Article 7 of the General Conditions. DFCM reserves all rights to pursue its rights and remedies as provided in the General Conditions.

ARTICLE 10. TERMINATION, SUSPENSION OR ABANDONMENT. This Contractor's Agreement may be terminated, suspended or abandoned in accordance with the General Conditions.

ARTICLE 11. DFCM'S RIGHT TO WITHHOLD CERTAIN AMOUNT AND MAKE USE THEREOF. The DFCM may withhold from payment to the Contractor such amount as, in DFCM's judgment, may be necessary to pay just claims against the Contractor or Subcontractor at any tier for labor and services rendered and materials furnished in and about the Work. The DFCM may apply such withheld amounts for the payment of such claims in DFCM's discretion. In so doing, the DFCM shall be deemed the agent of Contractor and payment so made by the DFCM shall be considered as payment made under this Contractor's Agreement by the DFCM to the Contractor. DFCM shall not be liable to the Contractor for any such payment made in good faith. Such withholdings and payments may be made without prior approval of the Contractor and may be also be prior to any determination as a result of any dispute, PRE, Claim or litigation.

ARTICLE 12. INDEMNIFICATION. The Contractor shall comply with the indemnification provisions of the General Conditions.

ARTICLE 13. SUCCESSORS AND ASSIGNMENT OF CONTRACT. The DFCM and Contractor, respectively bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement, and to partners, successors, assigns and legal representatives of such other party with respect to all covenants, provisions, rights and responsibilities of this Contractor’s Agreement. The Contractor shall not assign this Contractor’s Agreement without the prior written consent of the DFCM, nor shall the Contractor assign any moneys due or to become due as well as any rights under this Contractor’s Agreement, without prior written consent of the DFCM.

ARTICLE 14. RELATIONSHIP OF THE PARTIES. The Contractor accepts the relationship of trust and confidence established by this Contractor's Agreement and covenants with the DFCM to cooperate with the DFCM and A/E and use the Contractor's best skill, efforts and judgment in furthering the interest of the DFCM; to furnish efficient business administration and supervision; to make best efforts to furnish at all times an adequate supply of workers and materials; and to perform the Work in the best and most expeditious and economic manner consistent with the interests of the DFCM.

ARTICLE 15. AUTHORITY TO EXECUTE AND PERFORM AGREEMENT. Contractor and DFCM each represent that the execution of this Contractor's Agreement and the performance thereunder is within their respective duly authorized powers.

ARTICLE 16. ATTORNEY FEES AND COSTS. Except as otherwise provided in the dispute resolution provisions of the General Conditions, the prevailing party shall be entitled to reasonable attorney fees and costs incurred in any action in the District Court and/or appellate body to enforce this Contractor's Agreement or recover damages or any other action as a result of a breach thereof.

IN WITNESS WHEREOF, the parties hereto have executed this Contractor's Agreement on the day and year stated hereinabove.

CONTRACTOR: _____

_____
Signature Date

Title: _____

State of _____)
)
County of _____)

_____
Please type/print name clearly

On this ____ day of _____, 20____, personally appeared before me, _____, whose identity is personally known to me (or proved to me on the basis of satisfactory evidence) and who by me duly sworn (or affirmed), did say that he (she) is the _____ (title or office) of the firm and that said document was signed by him (her) in behalf of said firm.

_____
Notary Public

(SEAL)

My Commission Expires _____

APPROVED AS TO AVAILABILITY OF FUNDS:

_____
David D. Williams, Jr. Date
DFCM Administrative Services Director

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT

_____
Lynn A. Hinrichs Date
Assistant Director Construction Management

APPROVED AS TO FORM:
ATTORNEY GENERAL
July 15, 2008
By: Alan S. Bachman
Asst Attorney General

APPROVED FOR EXPENDITURE:

_____
Division of Finance Date

PERFORMANCE BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

That _____ hereinafter referred to as the "Principal" and _____, a corporation organized and existing under the laws of the State of _____, with its principal office in the City of _____ and authorized to transact business in this State and U. S. Department of the Treasury Listed (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies); hereinafter referred to as the "Surety," are held and firmly bound unto the State of Utah, hereinafter referred to as the "Obligee, " in the amount of _____ _____ DOLLARS ($_____) for the payment whereof, the said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract with the Obligee, dated the _____ day of _____, 20____, to construct _____ in the County of _____, State of Utah, Project No. _____, for the approximate sum of _____ _____ Dollars ($_____), which Contract is hereby incorporated by reference herein.

NOW, THEREFORE, the condition of this obligation is such that if the said Principal shall faithfully perform the Contract in accordance with the Contract Documents including, but not limited to, the Plans, Specifications and conditions thereof, the one year performance warranty, and the terms of the Contract as said Contract may be subject to Modifications or changes, then this obligation shall be void; otherwise it shall remain in full force and effect.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the state named herein or the heirs, executors, administrators or successors of the Owner.

The parties agree that the dispute provisions provided in the Contract Documents apply and shall constitute the sole dispute procedures of the parties.

PROVIDED, HOWEVER, that this Bond is executed pursuant to the Provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as amended, and all liabilities on this Bond shall be determined in accordance with said provisions to the same extent as if it were copied at length herein.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, 20_____.

WITNESS OR ATTESTATION:

_____

PRINCIPAL:

_____

By: _____ (Seal)

Title: _____

WITNESS OR ATTESTATION:

_____

SURETY:

_____

By: _____ (Seal)

Attorney-in-Fact

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, 20___, personally appeared before me _____, whose identity is personally known to me or proved to me on the basis of satisfactory evidence, and who, being by me duly sworn, did say that he/she is the Attorney in-fact of the above-named Surety Company and that he/she is duly authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations, and that he/she acknowledged to me that as Attorney-in-fact executed the same.

Subscribed and sworn to before me this _____ day of _____, 20_____.

My commission expires: _____

Resides at: _____

_____

NOTARY PUBLIC

Agency: _____
Agent: _____
Address: _____
Phone: _____

Approved As To Form: May 25, 2005
By Alan S. Bachman, Asst Attorney General

PAYMENT BOND

(Title 63, Chapter 56, U. C. A. l953, as Amended)

KNOW ALL PERSONS BY THESE PRESENTS:

That _____ hereinafter referred to as the "Principal," and _____ _____, a corporation organized and existing under the laws of the State of _____authorized to do business in this State and U. S. Department of the Treasury Listed (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies); with its principal office in the City of _____, hereinafter referred to as the "Surety," are held and firmly bound unto the State of Utah hereinafter referred to as the "Obligee," in the amount of _____ Dollars ($_____) for the payment whereof, the said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract with the Obligee, dated the _____ day of _____, 20____, to construct _____ in the County of _____, State of Utah, Project No. _____ for the approximate sum of _____ _____ Dollars ($_____), which contract is hereby incorporated by reference herein.

NOW, THEREFORE, the condition of this obligation is such that if the said Principal shall pay all claimants supplying labor or materials to Principal or Principal's Subcontractors in compliance with the provisions of Title 63, Chapter 56, of Utah Code Annotated, l953, as amended, and in the prosecution of the Work provided for in said Contract, then, this obligation shall be void; otherwise it shall remain in full force and effect.

That said Surety to this Bond, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations or additions to the terms of the Contract or to the Work to be performed thereunder, or the specifications or drawings accompanying same shall in any way affect its obligation on this Bond, and does hereby waive notice of any such changes, extensions of time, alterations or additions to the terms of the Contract or to the Work or to the specifications or drawings and agrees that they shall become part of the Contract Documents.

PROVIDED, HOWEVER, that this Bond is executed pursuant to the provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as amended, and all liabilities on this Bond shall be determined in accordance with said provisions to the same extent as if it were copied at length herein.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, 20____.

WITNESS OR ATTESTATION:

_____

PRINCIPAL:

_____

By: _____ (Seal)

Title: _____

WITNESS OR ATTESTATION:

_____

SURETY:

_____

By: _____

Attorney-in-Fact (Seal)

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, 20_____, personally appeared before me _____ _____, whose identity is personally known to me or proved to me on the basis of satisfactory evidence, and who, being by me duly sworn, did say that he/she is the Attorney-in-fact of the above-named Surety Company, and that he/she is duly authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations, and that he/she acknowledged to me that as Attorney-in-fact executed the same.

Subscribed and sworn to before me this _____ day of _____, 20_____.

My commission expires: _____

Resides at: _____

_____
NOTARY PUBLIC

Agency: _____
Agent: _____
Address: _____
Phone: _____

Approved As To Form: May 25, 2005
By Alan S. Bachman, Asst Attorney General

STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

Division of Facilities Construction and Management

DFCM

CERTIFICATE OF SUBSTANTIAL COMPLETION

PROJECT _____ PROJECT NO: _____

AGENCY/INSTITUTION _____

AREA ACCEPTED _____

The Work performed under the subject Contract has been reviewed on this date and found to be Substantially Completed as defined in the General Conditions; including that the construction is sufficiently completed in accordance with the Contract Documents, as modified by any change orders agreed to by the parties, so that the State of Utah can occupy the Project or specified area of the Project for the use for which it is intended.

The DFCM - (Owner) accepts the Project or specified area of the Project as Substantially Complete and will assume full possession of the Project or specified area of the Project at _____ (time) on _____ (date).

The DFCM accepts the Project for occupancy and agrees to assume full responsibility for maintenance and operation, including utilities and insurance, of the Project subject to the itemized responsibilities and/or exceptions noted below:

_____

_____

The Owner acknowledges receipt of the following closeout and transition materials:

As-built Drawings | O & M Manuals | Warranty Documents | Completion of Training Requirements

A list of items to be completed or corrected (Punch List) is attached hereto. The failure to include an item on it does not alter the responsibility of the Contractor to complete all the Work in accordance with the Contract Documents, including authorized changes thereof. The amount of _____(Twice the value of the punch list work) shall be retained to assure the completion of the punch list work.

The Contractor shall complete or correct the Work on the list of (Punch List) items appended hereto within _____ ____calendar days from the above date of issuance of this Certificate. The amount withheld pending completion of the list of items noted and agreed to shall be: $_____. If the list of items is not completed within the time allotted the Owner has the right to be compensated for the delays and/or complete the work with the help of independent contractor at the expense of the retained project funds. If the retained project funds are insufficient to cover the delay/completion damages, the Owner shall be promptly reimbursed for the balance of the funds needed to compensate the Owner.

_____ by: _____

CONTRACTOR (include name of firm) (Signature) DATE

_____ by: _____

A/E (include name of firm) (Signature) DATE

_____ by: _____

USING INSTITUTION OR AGENCY (Signature) DATE

_____ by: _____

DFCM (Owner) (Signature) DATE

4110 State Office Building, Salt Lake City, Utah 84114 cc: Parties Noted
telephone 801-538-3018 • facsimile 801-538-3267 • http://dfcm.utah.gov DFCM, Director

STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

Division of Facilities Construction and Management

DFCM

General Contractor Performance Rating Form

Project Name:		DFCM Project#	
Contractor: (ABC Construction, John Doe, 111-111-1111)	A/E: (ABC Architects, Jane Doe, 222-222-2222)	Original Contract Amount:	Final Contract Amount:
DFCM Project Manager:		Contract Date:	
Completion Date:		Date of Rating:	

Rating Guideline	QUALITY OF PRODUCT OR SERVICES	COST CONTROL	TIMELINESS OF PERFORMANCE	BUSINESS RELATIONS
5-Exceptional	Contractor has demonstrated an exceptional performance level in any of the above four categories that justifies adding a point to the score. Contractor performance clearly exceeds the performance levels described as "Very Good"			
4-Very Good	Contractor is in compliance with contract requirements and/or delivers quality product/service.	Contractor is effective in managing costs and submits current, accurate, and complete billings	Contractor is effective in meeting milestones and delivery schedule	Response to inquiries, technical/service/ administrative issues is effective
3-Satisfactory	Minor inefficiencies/errors have been identified	Contractor is usually effective in managing cost	Contractor is usually effective in meeting milestones and delivery schedules	Response to inquires technical/ service/administrative issues is somewhat effective
2-Marginal	Major problems have been encountered	Contractor is having major difficulty managing cost effectively	Contractor is having major difficulty meeting milestones and delivery schedule	Response to inquiries, technical/service/administrative issues is marginally effective
1-Unsatisfactory	Contractor is not in compliance and is jeopardizing achievement of contract objectives	Contractor is unable to manage costs effectively	Contractor delays are jeopardizing performance of contract objectives	Response to inquiries, technical/service/administrative issues is not effective

1. Rate Contractors quality of workmanship, management of sub contractor performance, project cleanliness, organization and safety requirement.	**Score**
Agency Comments:	
A & E Comments:	
DFCM Project Manager Comments:	

2. Rate Contractor administration of project costs, change orders and financial management of the project budget.	Score
Agency Comments:	
A & E Comments:	
DFCM Project Manager Comments:	

3. Rate Contractor's performance and adherence to Project Schedule, delay procedures and requirements of substantial completion, inspection and punch-list performance.	Score
Agency Comments:	
A & E Comments:	
DFCM Project Manager Comments:	

4. Evaluate performance of contractor management team including project manager, engineer and superintendent also include in the rating team's ability to work well with owner, user agency and consultants.	Score
Agency Comments:	
A & E Comments:	
DFCM Project Manager Comments:	

5. Rate success of Contractor's management plan, completion of the plans mitigation of project risks and performance of value engineering concepts.	Score
Agency Comments:	
A & E Comments:	
DFCM Project Manager Comments:	

Signed by:	Date:	Mean Score

Additional Comments:

Technical Specification For

Two New Houses
White Rocks Fish Hatchery, Whiterocks, Utah
Division of Facilities Construction Management Project Number 08206520

22 July 2008

P+A Architects
821 Kensington Avenue
Salt Lake City, Utah 84105

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REFRIGERATOR
FREESTANDING GAS RANGE
BUILT-IN DISHWASHER
MICROWAVE/MICROHOOD COMBINATION
WASHER
GAS DRYER
GAS WATER HEATER
FOOD WASTE DISPOSER

COMPOSITE DECKING MATERIALS

DECK
RAILINGS
TRIM

SECTION 01010 - SUMMARY OF WORK

1.1 GENERAL

A. The Project consists of demolition of two existing houses and providing two new housed. The project also consists of providing landscaping and providing one septic system for on of the houses

1. Project Location: Whiterocks State Fish Hatchery, Whiterocks, UT
2. Owner: State of Utah

B. Contract Documents, dated July 22nd 2008, were prepared for the project by P+A architects. located at 821 East Kensington Avenue, Salt Lake City, Utah

C. The Work will be constructed under a single prime contract.

D. Use of the Site: Limit use of premises to areas indicated on construction documents. Do not disturb portions of the site beyond the areas indicated.

1. Allow for Owner occupancy and use by the public.
2. Keep driveways and entrances clear. Do not use these areas for parking or material storage. Schedule deliveries to minimize on-site storage of materials and equipment.

1.2 CONTRACTOR USE OF PREMISES

A. General: During the construction period, the Contractor shall have use of the premises for construction operations as shown on construction documents. Parking and contractor staging at the site is limited and will be reviewed at the pre bid conference.

B. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.

1. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to other occupants and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

2. The general contractor shall provide 72 hours notice prior to shutting down any mechanical or electrical items that affect other areas in the building.

3. The general contractor shall provide protection of the existing elevator walls when using the elevators.

4. All interior corridors are to remain clear during the construction process.

5. The general contractors shall inform the owner, architect and D.F.C.M at least 36 hours prior to all work that will create sufficient noise that could disturb other classroom areas within the building.

END OF SECTION 01010

SECTION 01027 - APPLICATIONS FOR PAYMENT

1.1 GENERAL

A. Coordinate the Schedule of Values and Applications for Payment with the Contractor's Construction Schedule, Submittal Schedule, and List of Subcontracts.

B. Schedule of Values: Coordinate preparation of the Schedule of Values with preparation of the Contractor's Construction Schedule.

1. Correlate line items in the Schedule of Values with other required administrative schedules and forms, including:

   a. Contractor's Construction Schedule.
   b. Application for Payment forms, including Continuation Sheets.
   c. List of subcontractors.
   d. List of products.
   e. List of principal suppliers and fabricators.
   f. Schedule of submittals.

2. Submit the Schedule of Values at the earliest possible date but no later than 7 days before the date scheduled for submittal of the initial Applications for Payment.

C. Format and Content: Use the Project Manual table of contents as a guide to establish the format for the Schedule of Values. Provide at least one line item for each Specification Section.

1. Include the following Project identification:

   a. Project name and location.
   b. Name of Architect.
   c. Project number.
   d. Contractor's name and address.
   e. Date of submittal.

2. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:

   a. Related Specification Section or Division.
   b. Description of Work.
   c. Name of subcontractor.
   d. Name of manufacturer or fabricator.
   e. Name of supplier.
   f. Change Orders (numbers) that affect value.
   g. Dollar value.
   h. Percentage of Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.

3. Provide a breakdown of the Contract Sum in sufficient detail to facilitate evaluation of Applications for Payment. Break subcontract amounts down into several line items. Round amounts to nearest whole dollar; the total shall equal the Contract Sum.
4. Provide a separate line item for each part of the Work where Applications for Payment may include materials or equipment, purchased or fabricated and stored, but not yet installed.
5. Provide separate line items for initial cost of the materials, for each subsequent stage of completion, and for total installed value.

6. Show line items for indirect costs and margins on costs only when such items are listed individually in Applications for Payment. Each item in the Schedule of Values and Applications for Payment shall be complete. Include the total cost and proportionate share of general overhead and profit margin for each item.

    a. Temporary facilities and items that are not direct cost of work-in-place may be shown as separate line items or distributed as general overhead expense.

7. Update and resubmit the Schedule of Values when Change Orders or Construction Change Directives change the Contract Sum.

D. Applications for Payment shall be consistent with previous applications and payments as certified by the Owner and paid for by the Owner.

E. Payment-Application Times: Payment dates are indicated in the Agreement. The period covered by each application is the period indicated in the Agreement.

F. Payment-Application Forms: Use DFCM form for Applications for Payment.

G. Application Preparation: Complete every entry, including notarization and execution by a person authorized to sign on behalf of the Contractor. The owner will return incomplete applications without action.

1. Entries shall match data on the Schedule of Values and the Contractor's Construction Schedule. Use updated schedules if revisions were made.
2. Include amounts of Change Orders and Construction Change Directives issued prior to the last day of the construction period covered by the application.

H. Transmittal: Submit 3 executed original copies of each Application for Payment to the ownerwithin 24 hours. One copy shall be complete, including waivers of lien and similar attachments.

1. Transmit each copy with a transmittal listing attachments and recording appropriate information related to the application.

I. Waivers of Mechanics Lien: With each Application for Payment, submit waivers of lien from every entity who may file a lien arising out of the Contract and related to the Work covered by the payment.

1. Submit partial waivers on each item for the amount requested, prior to deduction for retainage, on each item.
2. When an application shows completion of an item, submit final or full waivers.
3. Submit each Application for Payment with Contractor's waiver of lien for the period of construction covered by the application.

    a. Submit final Applications for Payment with final waivers from every entity involved with performance of the Work covered by the application who may file a lien.

4. Waiver Forms: Submit waivers of lien on forms, and executed in a manner, acceptable to the Owner.

J. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of the first Application for Payment include the following:

1. List of subcontractors.
2. List of principal suppliers and fabricators.
3. Schedule of Values.

4. Contractor's Construction Schedule (preliminary if not final).
5. Submittal Schedule (preliminary if not final).
6. List of Contractor's staff assignments.
7. Copies of building permits.
8. Copies of licenses from governing authorities.
9. Certificates of insurance and insurance policies.
10. Performance and payment bonds.

K. Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit an Application for Payment. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

1. Administrative actions and submittals that shall precede or coincide with this application include the following:

a. Occupancy permits.
b. Warranties and maintenance agreements.
c. Maintenance instructions.
d. Meter readings.
e. Changeover information related to Owner's occupancy.
f. Final cleaning.
g. Application for reduction of retainage and consent of surety.

L. Final Payment Application: Administrative actions and submittals that must precede or coincide with submittal of the final Application for Payment include the following:

1. Completion of Project closeout requirements.
2. Completion of items specified for completion after Substantial Completion.
3. Transmittal of Project construction records to the Owner.
4. Removal of temporary facilities and services.
5. Change of door locks to Owner's access.

1.2 PRODUCTS (Not Applicable)

1.3 EXECUTION (Not Applicable)

END OF SECTION 01027

SECTION 01030 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes administrative and procedural requirements governing Alternates.

1.3 DEFINITIONS

A. Definition: An alternate is an amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if the Owner decides to accept a corresponding change in either the amount of construction to be completed, or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.

1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate the Alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

A. Coordination: Modify or adjust affected adjacent Work as necessary to completely and fully integrate that Work into the Project.

1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not mentioned as part of the Alternate.

B. Notification: Immediately following the award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate whether alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.

C. Execute accepted alternates under the same conditions as other Work of this Contract.

D. Schedule: A "Schedule of Alternates" is included at the end of this Section. Specification Sections referenced in the Schedule contain requirements for materials necessary to achieve the Work described under each alternate.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. Alternate No. 1: Additive alternate number one is for the general contractor to remove existing heat pumps and make-up air units as noted on mechanical drawings. The general contractor shall provide and install a new rooftop hvac unit with associated ductwork and diffusers. The general contractor shall remove the existing lay-in ceiling grid and tile system and after completion of work, the general contractor shall provide new tee grid suspension system and reinstall existing lay-in ceiling tile, light fixtures, speakers and smoke detectors.

END OF SECTION 01030

SECTION 01040 - COORDINATION

1.1 GENERAL

A. This Section includes requirements for coordinating construction operations including, but not necessarily limited to, the following:

1. Coordination drawings.
2. Administrative and supervisory personnel.
3. Cleaning and protection.

1.2 COORDINATION

A. Coordinate construction to assure efficient and orderly installation of each part of the Work. Coordinate operations that depend on each other for proper installation, connection, and operation.

1. Schedule operations in the sequence required to obtain the best results where installation of one part depends on installation of other components, before or after its own installation.
2. Coordinate installation of different components to assure maximum accessibility for maintenance, service, and repair.
3. Make provisions to accommodate items scheduled for later installation.

B. Where necessary, prepare memoranda for distribution to each party involved, outlining procedures required for coordination. Include such items as required notices and reports.

1. Prepare similar memoranda for the Owner and separate contractors where coordination of their work is required.

C. Administrative Procedures: Coordinate scheduling and timing of required procedures with other activities to avoid conflicts and assure orderly progress. Such activities include, but are not limited to, the following:

1. Preparation of schedules.
2. Delivery and processing of submittals.
3. Progress meetings.
4. Project closeout activities.

D. Conservation: Coordinate construction to assure that operations are carried out with consideration for conservation of energy, water, and materials.

E. Staff Names: Within 10 days of commencement of construction, submit a list of the Contractor's staff assignments, including the superintendent and other subcontractors at the Project. Identify individuals and their responsibilities. List their addresses and telephone numbers.

1.3 PRODUCTS (Not Applicable)

1.4 EXECUTION

A. Inspection of Conditions: Require Installers of major components to inspect substrate and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have been corrected.

B. Clean and protect construction in progress and adjoining materials, during handling and installation. Apply protective covering to assure protection from damage.

C. Clean and maintain completed construction as necessary through the construction period. Adjust and lubricate operable components to assure operability without damaging effects.

D. Limiting Exposures: Supervise construction to assure that no part is subject to harmful, dangerous, or damaging exposure. Such exposures include, but are not limited to, the following:

1. Excessive static or dynamic loading.
2. Excessive internal or external pressures.
3. Excessively high or low temperatures.
4. Water or ice.
5. Solvents and chemicals.
6. Abrasion.
7. Soiling, staining, and corrosion.
8. Combustion.
9. Wind.

END OF SECTION 01040

SECTION 01400 - QUALITY CONTROL

1.1 GENERAL

A. Quality-control services include inspections, tests, and related actions, including reports performed by Contractor, by independent agencies, and by governing authorities.

B. Contractor Responsibilities: Unless they are the responsibility of another entity, Contractor shall provide inspections and tests specified elsewhere and required by authorities having jurisdiction. Costs for these services are included in the Contract Sum.

1. Where inspections and tests are the Contractor's responsibility, the Contractor shall employ and pay a qualified independent testing agency to perform these services. Costs for these services are included in the Contract Sum.

C. Retesting: The Contractor is responsible for retesting where results of inspections and tests prove unsatisfactory and indicate noncompliance with requirements.

1. The cost of retesting is the Contractor's responsibility where tests performed indicated noncompliance with requirements.

D. Auxiliary Services: Cooperate with agencies performing inspections and tests. Provide auxiliary services as requested. Notify the agency in advance of operations to permit assignment of personnel. Auxiliary services include the following:

1. Providing access to the Work.
2. Furnishing incidental labor and facilities to assist inspections and tests.
3. Taking adequate quantities of representative samples of materials that require testing or assisting the agency in taking samples.
4. Providing facilities for storage and curing of test samples.
5. Delivering samples to testing laboratories.
6. Providing preliminary design mix proposed for use for materials mixes that require control by the testing agency.
7. Providing security and protection of samples and test equipment.

E. Duties of the Testing Agency: The testing agency shall cooperate with the owner and the Contractor in performing its duties. The agency shall provide qualified personnel to perform inspections and tests.

1. The agency shall notify the owner and the Contractor of irregularities or deficiencies observed in the Work during performance of its services.
2. The agency shall not release, revoke, alter, or enlarge requirements or approve or accept any portion of the Work.
3. The agency shall not perform duties of the Contractor.

F. Coordination: Coordinate activities to accommodate services with a minimum of delay. Avoid removing and replacing construction to accommodate inspections and tests.

1. The Contractor is responsible for scheduling inspections, tests, taking samples, and similar activities.

G. Submittals: The testing agency shall submit a certified written report, in duplicate, of each inspection and test to the Owner. If the Contractor is responsible for the service, submit a certified written report, in duplicate, of each inspection or test through the Contractor.

1. Submit additional copies of each report to the governing authority, when the authority so directs.
2. Report Data: Reports of each inspection, test, or similar service include, but are not limited to, the following:

    a. Date of issue.
    b. Project title and number.
    c. Name, address, and telephone number of testing agency.
    d. Dates and locations of samples and tests or inspections.
    e. Names of individuals making the inspection or test.
    f. Designation of the Work and test method.
    g. Identification of product and Specification Section.
    h. Complete inspection or test data.
    i. Test results and an interpretation of test results.
    j. Ambient conditions at the time of sample taking and testing.
    k. Comments or professional opinion on whether inspected or tested Work complies with requirements.
    l. Name and signature of laboratory inspector.
    m. Recommendations on retesting.

H. Qualifications for Service Agencies: Engage inspection and testing service agencies that are prequalified as complying with the American Council of Independent Laboratories' "Recommended Requirements for Independent Laboratory Qualification" and that specialize in the types of inspections and tests to be performed.

1. Each agency shall be authorized by authorities having jurisdiction to operate in the state where the Project is located.

1.2 PRODUCTS (Not Applicable)

1.3 EXECUTION

A. Repair and Protection: Upon completion of inspection, testing, and sample taking, repair damaged construction. Restore substrates and finishes. Comply with Division 1 Section "Cutting and Patching."

B. Protect construction exposed by or for quality-control service activities, and protect repaired construction.

C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for inspection and testing.

END OF SECTION 01400

SECTION 01500 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

1.1 GENERAL

A. Summary: This Section specifies construction facilities and temporary controls including temporary utilities, support facilities, and security and protection facilities.

B. Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction including, but not limited to, the following:

1. Building code requirements.
2. Health and safety regulations.
3. Utility company regulations.
4. Police, fire department, and rescue squad rules.
5. Environmental protection regulations.

C. Standards: Comply with NFPA 241 "Standard for Safeguarding Construction, Alterations, and Demolition Operations," ANSI A10 Series standards for "Safety Requirements for Construction and Demolition," and NECA Electrical Design Library "Temporary Electrical Facilities."

1.2 PRODUCTS

A. Equipment: Provide new equipment. If acceptable to the Owner, the Contractor may use undamaged, previously used equipment in serviceable condition. Provide equipment suitable for use intended.

1. Electrical Power Cords: Grounded extension cords. Use hard-service cords where exposed to abrasion and traffic.
2. Lamps and Light Fixtures: General service incandescent lamps. Provide guard cages or tempered-glass enclosures where exposed to breakage. Provide exterior fixtures where exposed to moisture.
3. Fire Extinguishers: Hand-carried, portable, UL-rated, Class A fire extinguishers for temporary offices and similar spaces. In other locations, provide hand-carried, portable, UL-rated, Class ABC, dry-chemical extinguishers or a combination of extinguishers of NFPA-recommended classes for the exposures.

   a. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.

1.3 EXECUTION

A. Installation, General: Use qualified personnel to install temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.

1. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

B. Security and Protection Facilities Installation: Except for use of permanent fire protection as soon as available, do not change over from use of temporary security and protection facilities to permanent facilities until Substantial Completion.

1. Temporary Fire Protection: Until permanent facilities supply fire-protection needs, install and maintain temporary fire-protection facilities of types needed to protect against controllable fire losses. Comply with NFPA 10 and NFPA 241.

   a. Locate fire extinguishers where convenient and effective for their intended purpose. Maintain unobstructed access to fire extinguishers.
   b. Store combustible materials in containers in fire-safe locations.
   c. Smoking prohibit
   d. Provide supervision of welding operations, combustion-type temporary heating units, and similar sources of fire ignition.

2. Permanent Fire Protection: At the earliest date, complete installation of the permanent fire-protection facility and place into operation and use. Instruct key personnel on use of facilities.
3. Environmental Protection: Operate temporary facilities and conduct construction in ways that comply with environmental regulations and minimize the possibility that air, waterways, and subsoil might be contaminated or polluted. Avoid use of tools and equipment that produce harmful noise. Restrict use of noise-making equipment to hours that will minimize complaints.

C. Operation: Enforce discipline in use of temporary facilities. Limit availability to intended uses to minimize waste and abuse.

END OF SECTION 01500

SECTION 01700 - CONTRACT CLOSEOUT

1.1 GENERAL

A. Closeout requirements for specific construction activities are included in the appropriate Sections in Divisions 2 through 16.

B. Substantial Completion: Before requesting inspection for certification of Substantial Completion, complete the following:

1. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the Work claimed as substantially complete.

    a. Include supporting documentation for completion and an accounting of changes to the Contract Sum.

2. Advise the Owner of pending insurance changeover requirements.
3. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents.
4. Submit record drawings, maintenance manuals, final project photographs, damage or settlement surveys, property surveys, and similar final record information.
5. Deliver tools, spare parts, extra stock, and similar items.
6. Changeover locks and transmit keys to the Owner.
7. Complete startup testing of systems and instruction of operation and maintenance personnel.
8. Complete final cleanup requirements, including touchup painting.
9. Touch up and repair and restore marred, exposed finishes.

C. Inspection Procedures: On receipt of a request for inspection, the Project Manager will proceed or advise the Contractor of unfilled requirements. The Project Manager will prepare the Certificate of Substantial Completion following inspection or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.

1. The Project Manager will repeat inspection when requested and assured that the Work is substantially complete.
2. Results of the completed inspection will form the basis of requirements for final acceptance.

D. Final Acceptance: Before requesting inspection for certification of final acceptance and final payment, complete the following:

1. Final payment request with releases and supporting documentation. Include insurance certificates where required.
2. Submit a statement, accounting for changes to the Contract Sum.
3. Submit a copy of the final inspection list stating that each item has been completed or otherwise resolved for acceptance.
4. Submit consent of surety to final payment.
5. Submit a final settlement statement.
6. Submit evidence of continuing insurance coverage complying with insurance requirements.

E. Reinspection Procedure: The owner will reinspect the Work upon receipt of notice that the Work has been completed, except for items whose completion is delayed under circumstances acceptable to the owner.

1. Upon completion of reinspection, the owner will prepare a certificate of final acceptance. If the Work is incomplete, the owner will advise the Contractor of Work that is incomplete or obligations that have not been fulfilled but are required.
2. If necessary, reinspection will be repeated.

F. Record Document Submittals: Do not use record documents for construction. Protect from loss in a secure location. Provide access to record documents for the owners's reference.

G. Record Drawings: Maintain a set of prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark the drawing most capable of showing conditions fully and accurately. Give attention to concealed elements.

1. Mark sets with red pencil. Use other colors to distinguish between variations in separate categories of the Work.
2. Organize record drawing sheets into manageable sets. Bind with durable-paper cover sheets; print titles, dates, and other identification on the cover of each set.

H. Record Specifications: Maintain one copy of the Project Manual, including addenda. Mark to show variations in Work performed in comparison with the text of the Specifications and modifications. Give attention to substitutions and selection of options and information on concealed construction. Note related record drawing information and Product Data.

1. Upon completion of the Work, submit record Specifications to the owner for their records.

I. Maintenance Manuals: Organize operation and maintenance data into sets of manageable size. Bind in individual, heavy-duty, 2-inch (51-mm), 3-ring, binders, with pocket folders for folded sheet information. Mark identification on front and spine of each binder. Include the following information:

1. Copies of warranties.

1.2 PRODUCTS (Not Applicable)

1.3 EXECUTION

A. Operation and Maintenance Instructions: Include a detailed review of the following items:

1. Maintenance manuals.

B. As part of instruction for operating equipment, demonstrate the following:

1. Startup and shutdown.
2. Noise and vibration adjustments.

C. Final Cleaning: Employ experienced cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Complete the following operations before requesting inspection for certification of Substantial Completion.

1. Remove labels that are not permanent labels.
2. Clean exposed finishes to a dust-free condition, free of stains, films, and foreign substances. Leave concrete floors broom clean.

3. Wipe surfaces of electrical equipment. Remove excess lubrication. Clean light fixtures and lamps.
4. Clean the site of rubbish, litter, and foreign substances. Sweep paved areas; remove stains, spills, and foreign deposits. Rake grounds to a smooth, even-textured surface.

D. Removal of Protection: Remove temporary protection and facilities.

E. Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Remove waste materials and dispose of lawfully.

END OF SECTION 01700

SECTION 01740 - WARRANTIES

1.1 GENERAL

A. Standard product warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.

B. Special warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

C. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

D. Related Damages and Losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.

E. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.

F. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.

G. Owner's Recourse: Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies.

   1. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
   2. Where the Contract Documents require a special warranty, or similar commitment, the Owner reserves the right to refuse to accept the Work, until the Contractor presents evidence that entities required to countersign such commitments are willing to do so.

H. Submit written warranties to the Architect prior to the date certified for Substantial Completion. If the Owner's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion, submit written warranties upon request of the Owner's.

I. When the Contract Documents require the Contractor, or the Contractor and a subcontractor, supplier or manufacturer to execute a special warranty, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner for approval prior to final execution.

   1. Refer to Divisions 2 through 16 Sections for specific content requirements and particular requirements for submitting special warranties.

J. Bind warranties and bonds in heavy-duty, commercial-quality, durable 3-ring, vinyl-covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (115-by-280-mm) paper.

1. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address, and telephone number of the Installer.
2. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project title or name, and name of the Contractor.
3. When warranted construction requires operation and maintenance manuals, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

1.2 PRODUCTS (Not Applicable)

1.3 EXECUTION

A. Schedule: Provide warranties on products and installations as specified in the following Sections:

END OF SECTION 01740

SECTION 08361 - SECTIONAL OVERHEAD DOORS

1.1 GENERAL

A. Performance Requirements: Provide sectional overhead doors capable of withstanding the effects of gravity loads and uniform wind-load pressure (velocity pressure) of 20 lbf/sq. ft. (960 Pa), acting inward and outward, without evidencing permanent deformation of door components. Design sectional overhead door components and operator to operate for not less than 10,000 cycles. One complete cycle of a door begins with the door in the closed position. The door is then moved to the open position and back to the closed position.

B. Submittals: In addition to manufacturer's Product Data, submit the following:

1. Summary of forces and loads on walls and jambs.
2. Samples of colors available and samples for verification, of each type of exposed finish required.

C. Listing and Labeling: Provide electrically operated fixtures specified in this Section that are listed and labeled as defined in NFPA 70, Article 100.

1.2 PRODUCTS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Amarr Garage Doors.
2. Arm-R-Lite Door Manufacturing Co., Inc.
3. McKee Door, Inc.; A United Dominion Company.
4. Raynor Garage Doors.
5. Roll-Lite Door Corp.; Div. of Clopay Building Products Co.
6. Wayne-Dalton Corp.
7. Windsor Door; A United Dominion Company

B. Steel Door Sections: Structural-quality carbon-steel sheets complying with ASTM A 653 (ASTM A 653M), commercial quality, with a minimum yield strength of 33,000 psi (225 MPa) and a minimum G60 (Z180) zinc coating.

1. Steel Sheet Thickness: 0.064 inch (1.6 mm).
2. Exterior Section Face: Flat.
3. Fabricate door panels from a single sheet to provide sections not more than 24 inches (600 mm) high and nominally 2 inches (50 mm) deep. Roll horizontal meeting edges to a continuous, interlocking, weathertight seal, with a reinforcing flange return. Reinforce sections with continuous horizontal and diagonal galvanized steel reinforcement, as required to stiffen door and for wind loading, formed to depth, and bolted or welded in place. Provide reinforcement for hardware attachment.

   a. For insulated doors, provide door sections with continuous thermal-break construction, separating faces of door.

4. End Stiles: Not less than 0.064-inch (1.6-mm) galvanized steel channel, welded in place.
5. Intermediate Stiles: Not less than 0.064-inch (1.6-mm) galvanized steel, cut to door section profile, spaced at not more than 48 inches (1200 mm) o.c., and welded in place.
6. Bottom Bar: Reinforce bottom section with a continuous channel or angle.

7. Insulation: Manufacturer's standard rigid cellular polystyrene or polyurethane-foam-type thermal insulation, foamed in place to completely fill inner core of section, pressure bonded to face sheets to prevent delamination under wind load and with maximum flame-spread and smoke-developed indices of 75 and 450, respectively, according to ASTM E 84. Enclose insulation completely, with no exposed insulation material evident.

   a. Steel Sheet Inside Face: 0.028 inch (0.7 mm) thick.

C. Tracks: Provide manufacturer's standard, steel track system, sized for door size and weight, designed for lift type indicated and clearances shown, and complying with ASTM A 653 (ASTM A 653M), for minimum G60 (Z180) zinc coating. Provide complete track assembly including brackets, bracing, and reinforcement for rigid support of ball-bearing roller guides for required door type and size. Slot vertical sections of track at 2 inches (50 mm) o.c. for door-drop safety device. Slope tracks at proper angle from vertical or otherwise design to ensure tight closure at jambs when door unit is closed. Weld or bolt to track supports. Configure tracks for the following lift type:

   1. Low headroom. (Note, 8" max. clearance)

D. Track Reinforcement and Supports: Galvanized steel, complying with ASTM A 36 (ASTM A 36M) and ASTM A 123 as required for door size and weight. Support and attach tracks to opening jambs with continuous angle welded to tracks and attached to wall. Support horizontal (ceiling) tracks with continuous angle welded to track and supported by laterally braced attachments to overhead structural members at curve and end of tracks.

E. Weatherseals: Provide replaceable, adjustable, continuous, compressible weather-stripping gaskets of flexible vinyl, rubber, or neoprene fitted to bottom, jambs, and at top of overhead door.

   1. Provide motor-operated doors with combination bottom weatherseal and sensor edge.

F. Hardware: Manufacturer's standard heavy-duty, corrosion-resistant hinges, rollers, push/pull handles for push-up-operated or emergency-operated doors and locking device with Cremone-type locking bar, engaging slots in tracks at both jamb sides, operable from inside and outside.

   1. Lock cylinder is specified in another Division 8 Section.

G. Where door unit is power operated, provide safety interlock switch to disengage power supply when door is locked.

H. Counterbalance Mechanism: Consisting of adjustable-tension torsion springs, fabricated from oil-tempered-steel wire complying with ASTM A 229 (ASTM A 229M), Class II, mounted on a cross-header tube or steel shaft. Connect to door with galvanized aircraft-type lift cables, with cable safety factor of at least 5 to 1, wound around cast-aluminum or gray-iron casting grooved cable drums. Mount counterbalance mechanism with manufacturer's standard ball-bearing brackets at each end of shaft and at intermediate points as required for support. Include cable safety device, spring anchor support bracket, and spring bumper.

I. Finishes: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

J. Thermoset Finish for Steel and Galvanized Steel: Apply manufacturer's standard baked enamel finish consisting of primer coat and 2 topcoat according to coating manufacturer's written instructions for cleaning, pretreatment, application, thermosetting, and minimum dry film thickness.

K. Push-up Operation: Design counterbalance mechanism so required lift or pull for door operation does not exceed 25 lbf (111 N).

L. Direct-Drive Chain-Hoist Operator: Provide side-mounted unit consisting of endless steel hand chain, cast-iron chain pocket wheel, and guard, mounted on counterbalance shaft. Operate with not more than 35-lbf (155-N) pull.

M. Electric Door Operator: Type, size, and capacity recommended and provided by door manufacturer for door, track configuration, and operational life specified, with electric motor and factory-prewired motor controls, starter, gear-reduction unit, solenoid-operated brake, clutch, remote-control stations, control devices, integral gearing for locking door, disconnect device, emergency auxiliary operator, and accessories required for proper operation. Comply with NFPA 70. Design operator so motor may be removed without disturbing limit-switch adjustment and without affecting emergency auxiliary operator.

1. Electric Motors: Provide polyphase, medium-induction type with high-starting torque, reversible, continuous-duty, Class A insulated, electric motors, complying with NEMA MG 1, with overload protection, sized to start, accelerate, and operate door in either direction, from any position, at not less than 2/3 fps (0.2 m/s) or more than 1 fps (0.3 m/s), without exceeding nameplate ratings or considering service factor. Coordinate wiring requirements and electric characteristics of motors with building electrical system.

   a. Provide open dripproof-type motor, and controller with NEMA ICS 6, Type 1 enclosure.

2. Control Equipment: NEMA ICS 1, NEMA ICS 2, and NEMA ICS 6, with NFPA 70 Class 2 control circuit, maximum 24-V, ac or dc. Provide momentary-contact, 3-button control station.

   a. Interior Units: Full-guarded, surface-mounted, heavy-duty type, with general-purpose NEMA ICS 6, Type 1 enclosure.
   b. Exterior Units: Full-guarded, standard-duty, surface-mounted, weatherproof type, NEMA ICS 6, Type 4 enclosure, key operated.

3. Obstruction Detection Device: Provide each motorized door with self-monitoring, 4-wire-configured-type, electrically actuated, external automatic safety sensor able to protect full width of door opening. Activation of sensor immediately stops and reverses downward door travel.
4. Adjustable Limit Switches: Interlocked with motor controls and set to automatically stop door at fully opened and fully closed positions.

N. Automotive Opening and Closing Control Radio Control Device: : Provide radio control system consisting of the following:

1. provide (4) Multifunction remote control units.

1.3 EXECUTION

A. Installation: Install door, track, and operating equipment complete with necessary hardware, jamb and head mold strips, anchors, inserts, hangers, and equipment supports according to Shop Drawings, manufacturer's written instructions, and as specified.

B. Fasten vertical track assembly to framing at not less than 24 inches (600 mm) o.c. Hang horizontal track from structural overhead framing with angle or channel hangers welded and bolt fastened in place. Provide sway bracing, diagonal bracing, and reinforcement as required for rigid installation of track and door-operating equipment.

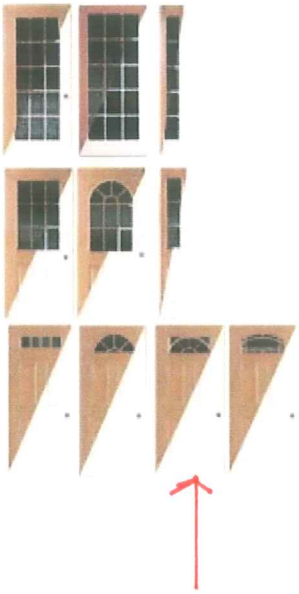
C. Lubricate bearings and sliding parts; adjust doors to operate easily, free from warp, twist, or distortion and fitting weathertight for entire perimeter.

END OF SECTION 08361

Entrance Doors

BASIC FIBERGLASS DOORS WITH EXTERNAL GRIDS

STYLES/DESIGNS



FW / FEW = Wood Grain Texture; FE = Smooth Ski
{Sizes are listed in brackets}

Top row, left to right:
FW-30 / F-30: Full lite with external grids; flush face {2-6 x 6-8; 2-8 x 6-8; 3-0 x 6-8; 2-6 x 8-0; 2-8 x 8-0;
FWSL-30W / FSL-30W: Extra wide sidelite with exte face {ask about sizes}
FWSL-30 / FSL-30: Sidelite with external grids; flusl {1-0 x 6-8; 1-2 x 6-8; 1-0 x 8-0; 2-0 x 8-0}

Middle row, left to right:
FEW-126 / FE-126: Half-lite with external grids over {2-6 x 6-8; 2-8 x 6-8; 3-0 x 6-8}
FEW-194 / FE-194: Half-circle top lite with external g panels {2-8 x 6-8; 3-0 x 6-8}
FEWSL-126 / FESL-126: Sidelite with external grids panel (to match previous two doors) {1-0 x 6-8; 1-2 x

Bottom row, left to right:
FEW-112 / FE-112: Small, horizontal top lite with ext raised panels {2-8 x 6-8; 3-0 x 6-8}
FEW-158 / FE-158: Small, half-circle lite with externa raised panels {2-8 x 6-8; 3-0 x 6-8}
FEW-116 / FE-116: Small, rectangular lite with exter sunburst pattern over 4 raised panels {2-8 x 6-8; 3-0
FEW-115 / FE-115: Small, eyebrow lite with external modified marginal pattern over 4 raised panels {2-8 :

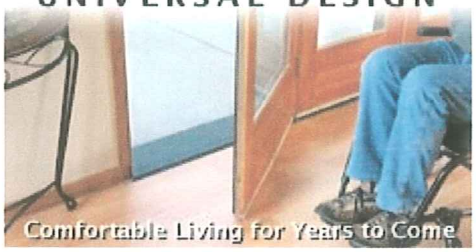
HANDLES & LOCKS

- One single bore (as standard, prepped for one 2- bore with 2-3/8" or 2-3/4" backset with a 1" cross bor strike prep made to frame)

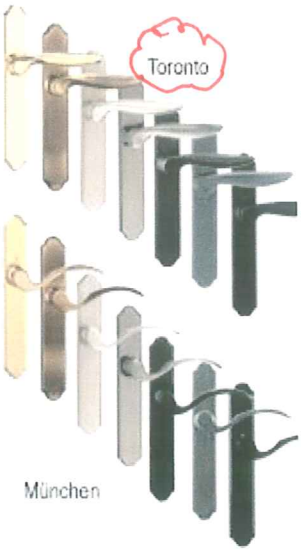
Options:
- Stainless steel, multi-point locking hardware on s the following handles:
  - Toronto handle set (top row)
  - München handle set (bottom row)
- OR Nobilus hardware is available for Kolbe door
- No boring
- Custom boring
- Keyed lock

Toronto & München Handle Set Colors (left to rigl vary by color):
Bright Brass
Antique Brass
Satin Nickel

UNIVERSAL DESIGN



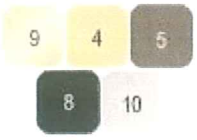
For 3D SketchUp models of
Kolbe® windows & doors, please visit:
Google
3D Warehouse



Antique Nickel
Oil-Rubbed ("living finish" may change with use)
Rustic Umber
Matte Black

NOTE: Actual colors may appear different than shov
select colors using samples from your dealer.

OPERATING HARDWARE



> 4x4 Steel Hinges with a Security Tab (standard)
Colors 9, 5, 8, 10
> 4x4 Spring Hinges (option) Colors 9, 5, 8, 10
> 4x4 Ball Bearing Hinges (option) Colors 9, 4
> Adjustable Hinges (option)

Hinge Colors:
9 - Yellow Zinc (standard)
4 - Bright Brass
5 - Antique Brass
8 - Oil-Rubbed (this is a "living finish" that will patina
10 - Dull Chrome
Prices may vary depending on color selected.

NOTE: Actual colors may appear different than shov
select colors using samples from your dealer.

GLASS

- Tempered H°K, 7/8" dual-insulating glass units w
coating, argon gas & Thermo-Edge spacers (standa
Options:
- Tempered LoE³-366 for optimal energy efficiency
- Tempered H°K, LoE²-240 Glare Control for solar
- Tempered laminated glass

NOTES: Argon may not be included in units shipped
areas

Learn More about Glass Features & Options

EXTERIOR FINISH

Unfinished (standard on both door frame & panel)

Factory-Applied Stain (option door panels only; no
COLORS: *(view colors below, under Interior Finish)*
Wheat, Light Oak 998, Sunset Oak, Chestnut, Cherr

K-Kron II high performance finish
(option, door frames and/or panels) +
- 31 standard colors *(view colors below, under Inte*
- Protective finish
- 10-Year Film Integrity Warranty

FLUOROPOLYMER COLORS
STANDARD

SPECIALTY

Extruded Aluminum Cladding with Fluoropolyme
inswing door frames only, not panels) +

- 13 standard colors
- 19 specialty colors (*)
- Durable finish meets performance requirements
- 30-Year Warranty

STANDARD COLORS: *(left to right; click image to*
Row 1: Ultra Pure White, Abalone, Beige, Sand, Nat
Row 2: Rustic, Gingersnap, Coal Black, Hartford Gre
Row 3: Patriotic Blue, Merlot, Chutney, Slate
SPECIALTY COLORS: *(may incur additional charge lead times)*
Row 4: White, Alabaster, Spiced Vinegar
Row 5: Green Tea Leaf, Frosted Jade, Mystic Ivy, B
Row 6: Timberwolf, Waterford, Cape Cod, Kiwi, Butt
Row 7: Truffle, Manchester, Mudpie, Camel, Pumpki

Custom colors available
Monitor colors vary, so please make selections usin

INTERIOR FINISH

FIBERGLASS STAIN COLORS

K-KRON II COLORS

Unfinished (standard on both door frame & panel)

Factory-Applied Stain (option door panels only; no
COLORS: *(left to right; click image to enlarge)*
Wheat, Light Oak 998, Sunset Oak, Chestnut, Cherr

K-Kron II high performance finish
(option, door frames and/or panels) +

- 31 standard colors
- Protective finish
- 10-Year Film Integrity Warranty

COLORS *(left to right; click image to enlarge)*
Row 1: Beige, Sand
Row 2: Spiced Vinegar, Bay Leaf, Hartford Green, G
Row 3: Rustic, Merlot, Chutney, Slate, Patriotic Blue
Row 4: Alabaster, White, Ultra Pure White, Abalone,
Row 5: Frosted Jade, Basil, Mystic Ivy, Antique Red
Row 6: Timberwolf, Waterford, Cape Cod, Butterscc
Row 7: Mudpie, Manchester, Truffle, Camel, Pumpki

Custom colors available
Monitor colors vary, so please make selections usin

EXTERIOR TRIM, WOOD FRAME UNITS

Exterior Wood Trim (top to bottom):

- 1-15/16" Profiled Brickmould (standard) shown w

Nosing

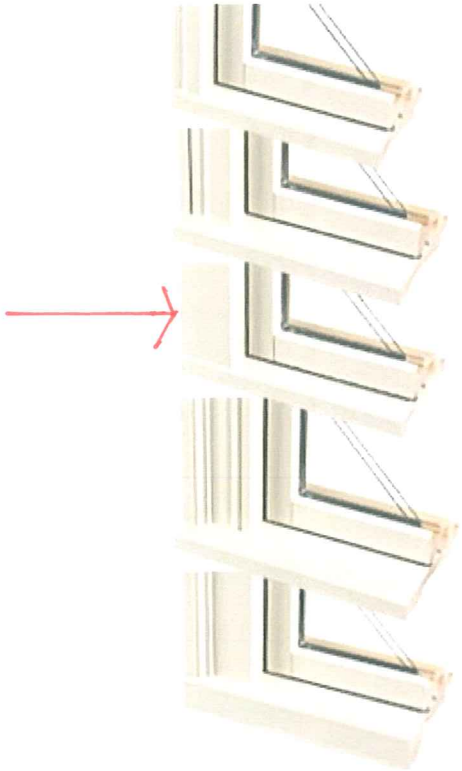
Options:

- 3-1/2" Profiled Brickmould shown with 2-3/4" Sill
- 3-1/2" Flat Casing shown with 2" Sill Nosing
- 3-1/2" Profiled Brickmould with Backband shown

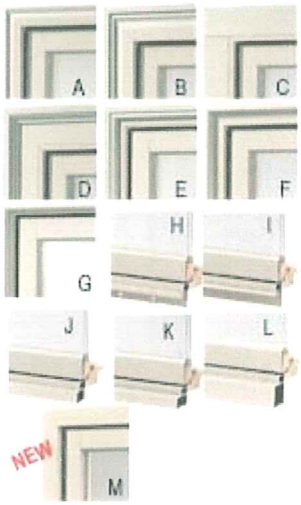
Nosing

- 3-1/2" Flat Casing with Backband shown with His

Learn More about Exterior Wood Trim, Nosing, and Accessories



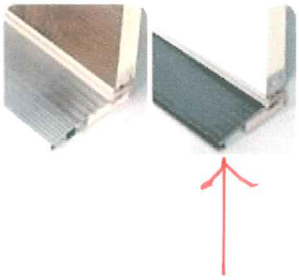
EXTERIOR TRIM OPTIONS, CLAD FRAME UNITS



Extruded Aluminum Trim Options (outswing doors o
A - 1-15/16" profiled brickmould
B - 3-1/2" profiled brickmould
C - 3-1/2" flat casing
D - 3-1/2" flat casing with backband
E - Historic brickmould
F - Bullnose brickmould
G - Ogee casing
H - Traditional sill nosing (available w/ A, B & C)
I - Sill drip (available w/ A, B & C)
J - 1-5/8" projected sill nosing (available w/ A, B & C
K - 2-1/8" projected sill nosing (available w/ D, F & G
L - 2-1/8" historic sill nosing (standard w/ E)
M - 2" flat casing

Learn More about Extruded Aluminum Trim

SILL



- Bronze anodized adjustable sill with a hardwood mill finish is optional, shown far left)

Options:

- Bronze anodized weep sill (shown right; inswing
- Bronze anodized handicap sill with or without a t 4-9/16" or 6-9/16" jambs only; deduct 5/8" from the s height)
- Continuous Sill (select inswing units only; head j continuous)
- No sill

Product specifications & pricing are subject to change without notice.

The customer is responsible for verifying information before placing orders.

Interior Doors

KOLBE ADVANTAGE DECORATOR DOORS

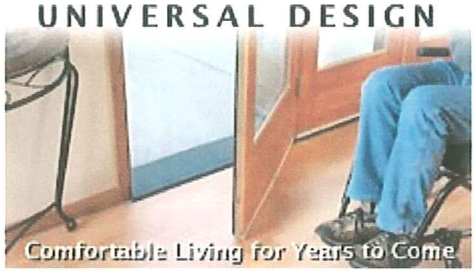
SIZES & SPE

CONSTRUCTION

Decorator Doors Offer Design Flexibility

- Medium Density Fiberboard (MDF) with Solid Ro
- Single- & Double-Wide Doors Available
- Bifolds with Matching Routered Panels on Visible
- Doors may be 1-3/8" or 1-3/4" thick
- Bifolds may be 7/8" or 1-3/8" thick
- Routered Panels are 1-3/8" thick on Doors
- Routered Panels may be 7/8" or 1-3/8" thick on E
- Factory-Primed as standard
- Doors & Bifolds available as Slabs or Prehung

UNIVERSAL DESIGN



STYLES/DESIGNS

Styles:

1-Panel:
- M1TH (Traditional)
- M1AH (Arch)
- M1CH (Classic)

2-Panel:
- M2TH (Traditional)
- M2AH (Arch)
- M2CH (Classic)
- M2VH (Vertical)
- M2EH (Eyebrow)

3-Panel:
- M3TH (Traditional)
- M3AH (Arch)
- M3CH (Classic)
- M3HH (Horizontal)
- M3NT (Non-Traditional)

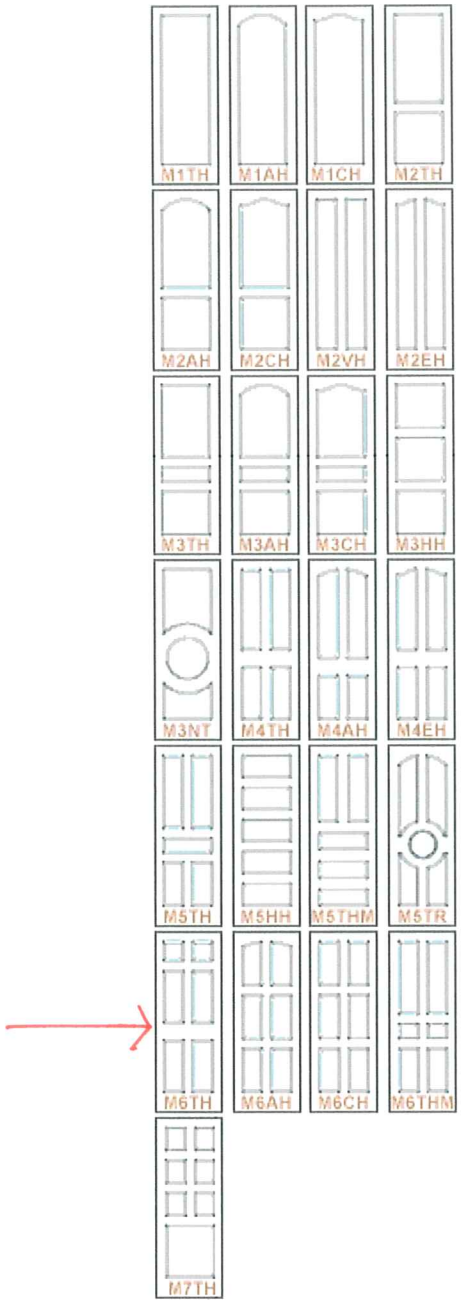
4-Panel:
- M4TH (Traditional)
- M4AH (Arch)
- M4EH (Eyebrow)

5-Panel:
- M5TH (Traditional)
- M5HH (Horizontal)
- M5THM (Traditional Modified)
- M5TR (Traditional Round)

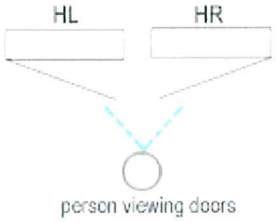
6-Panel:
- M6TH (Traditional)
- M6AH (Arch)
- M6CH (Classic)
- M6THM (Traditional Modified)

7-Panel:
- M7TH (Traditional)

For 3D SketchUp models of Kolbe® windows & doors, please visit:
Google 3D Warehouse



OPERATING HARDWARE



- Single bore with 2-3/8" backset, 2-1/8" face bore (standard)
- 1-1/8" x 2-1/4" Mortise latch prep (option)

Prehung Units:

- Three 3-1/2 x 3-1/2 ball bearing hinges (standard
- 4 x 4 ball bearing hinges (standard on 1-3/4" doo

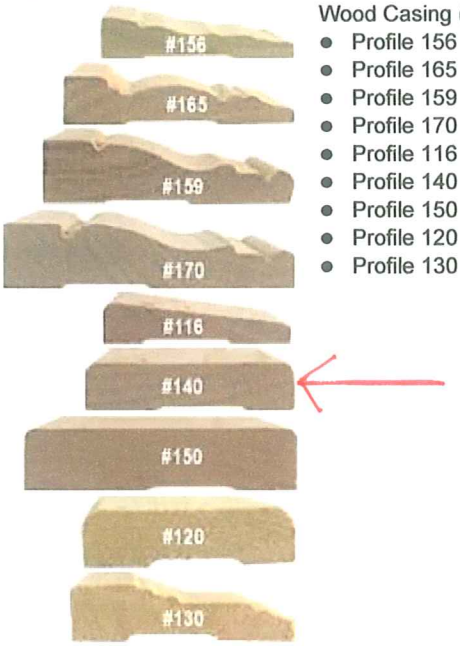
Hinge Colors: Satin Brass (standard, AKA Zinc Dich Antique Brass, Bright Chrome, Dull Chrome, Satin N Nickel, Oil-Rubbed (living finish)

NOTE: Hinging is determined as the door is pulled tc hinges are on the left, it is a hinged-left (HL) door. If the right, it is a hinged-right (HR) door.

Double Doors, must add:

- Astragal
- Roller Catch or Head & Foot Bolt

INTERIOR TRIM OPTIONS



Wood Casing (option; available in wood species spe

- Profile 156 - 2-1/4" Colonial Casing in Oak, Mapl
- Profile 165 - 2-3/4" Colonial Casing in Oak or Ma
- Profile 159 - 3" Colonial Casing in Oak, Maple or
- Profile 170 - 3-1/2" Colonial Casing in Oak or Ma
- Profile 116 - 2-1/4" Ranch Casing in Oak, Maple
- Profile 140 - 2-1/2" Round Edge Casing in Oak o
- Profile 150 - 3-1/4" Round Edge Casing in Oak o
- Profile 120 - 2-9/16" Flat Casing in Knotty Pine
- Profile 130 - 2-9/16" Princeton Casing in Knotty F

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Kolbe Advantage Specifications

	SELECT RAISED PANEL & FLAT PANEL BASIC RAISED PANEL		RUSTIC RAISED PANEL		SELECT FRENCH	DECORATOR MDF		FLUSH	
	Doors	Bifolds	Doors	Bifolds	Doors	Doors	Bifolds	Doors	Bifolds
Door Thickness	1-3/8", 1-3/4"	1-3/8", 1-3/4"	1-3/8", 1-3/4"[k]	1-3/8"[m]	1-3/8", 1-3/4"	1-3/8", 1-3/4"	7/8", 1-3/8"	1-3/8", 1-3/4"	1-3/8", 1-3/4"
DIMENSIONS:[a]									
Stiles	4-3/8"[b]	2-3/16"	N/A	varies	4-3/8"	4-3/8"	2-3/16"	N/A	N/A
Top Rail	4-3/8"	4-3/8"	4-1/2"	varies	4-3/8"	4-3/8"	4-3/8"	N/A	N/A
Lock Rail[g]	7-5/8"	7-5/8"	6"	varies	N/A	7-5/8"	7-5/8"	N/A	N/A
Bottom Rail	9-1/8"	8-1/8"	9"	varies	9-1/8"[d]	9-1/8"	8-1/8"	N/A	N/A
Mullions & Intermediate Rail	4-3/8"	N/A	N/A	N/A	1-1/16"	4-3/8"	N/A	N/A	N/A
Panel Thickness	Raised = 3/4" Flat = 1/2"	Raised = 1/2"[e] Flat = 1/2"	3/4", 1-1/2"[l]	3/4"	N/A	1-3/8"	7/8", 1-3/8"	N/A	N/A
Standard Heights	6'8", 7'0", 7'6", 8'0"	6'7", 6'11", 7'5", 7'11"	6'8"	6'7"	6'8", 7'0", 7'6", 8'0"[f]	6'8", 7'0", 8'0"	6'7", 6'11", 7'11"	6'8", 7'0", 7'6", 8'0"	6'7", 6'11", 7'5", 7'11"
Standard Widths[b c]	1'0", 1'2", 1'3", 1'4", 1'6", 1'8", 1'10", 2'0", 2'2", 2'4", 2'6", 2'8", 2'10", 3'0", 3'6"[d]	2'0", 2'6", 2'8", 3'0" (1/2" undersized)	1'6", 2'0", 2'4", 2'6", 2'8", 3'0"	2'0", 2'6", 3'0"	see below for widths per design	1'0", 1'2", 1'3", 1'4", 1'6", 1'8", 1'10", 2'0", 2'2", 2'4", 2'6", 2'8", 2'10", 3'0"	2'0", 2'6", 2'8", 3'0" (1/2" undersized)	1'0", 1'2", 1'3", 1'4", 1'6", 1'8", 1'10", 2'0", 2'2", 2'4", 2'6", 2'8", 2'10", 3'0", 3'6"	2'0", 2'6", 2'8", 3'0" (1/2" undersized)

French Door Standard Widths:

Full View:	1'6", 2'0", 2'4", 2'6", 2'8", 3'0"
PDL French:	1'6" - 5 lite, 2'0" - 9,10 lite; 2'4", 2'6", 2'8", 2'10", 3'0" - 9,10, 15 lite
Faux V-Groove French:	2'0" - 10 lite; 2'4", 2'6", 2'8", 3'0" - 15 lite
Etched Pantry[h]:	2'0" - 10 lite; 2'4", 2'6", 2'8", 3'0" - 15 lite
Half-Lites[i]:	2'0", 2'4", 2'6", 2'8", 2'10", 3'0" (with lock rail); stain grade only Standard heights of 6'8", 7'0, 7'6", 8'0" with clear flat glass
12-lite with Panel[i]:	2'4", 2'6", 2'8", 2'10", 3'0" (with small 4-3/8" lock rail) Standard heights of 6'8", 7'0, 7'6", 8'0" with clear flat glass

All French doors have tempered glass with a certified stamp as required by most building codes. Glass is compression-fit into mullions.

In addition, each tempered glass pane is individually wrapped with a plastic film to prevent scratches during finishing and delivery.

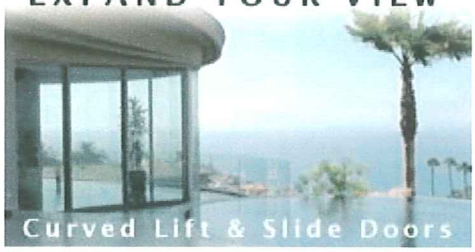
SPECIFICATION NOTES:

a Dimension is to panel edge.
b To maintain structural integrity, doors 1'10" or less have half the panel count shown in the door code (e.g. 1'8" 4TH = 2 panels).
c Doors 1'4" and less have a 2-3/16" stile dimension width. Any door with a 2-3/16" stile dimension width and no lock rail cannot be bored.
d Width of 3'6" available in Select Raised and Flat Panel only.
e Raised panel bifolds have a flat surface on reverse side (e.g. panels facing interior of closet).
f Size shown is for standard 6'8" French door. Bottom rail is 13-1/8" for a 7'0" door; 11-5/8" for a 7'6" and 8'0" door.
g Certain door styles do not have lock rails.
h Etched glass doors available in 6'8" and 7'0" sizes, stain-grade or primed. 8'0" is available with bottom panel (stain-grade only).
i Half-lite doors, including 12-lite, can be ordered with different glass styles.
j 1-3/8" MDF bifolds require heavy duty hardware and are 7/8" smaller in height.
k Rustic doors made of AugustaWood (style 2AAW) have a door thickness of 1-3/4".
l Rustic doors made of AugustaWood (style 2AAW) have a panel thickness of 1-1/2".
m Bifold doors are not available to match Rustic doors made of AugustaWood (style 2AAW).

Veneer faces may contain multiple flitches due to species and veneer matching limitations.
All dimensions provided are nominal. Dimensions are subject to engineering changes and product upgrades.

Double Exterior Doors

EXPAND YOUR VIEW



For 3D SketchUp models of Kolbe® windows & doors, please visit:
Google 3D Warehouse

BASIC FIBERGLASS DOORS WITH INTEGRAL BLINDS & SHADES

CONSTRUCTION

Integral Blinds:
Aluminum slats sealed between panes of dual-insula

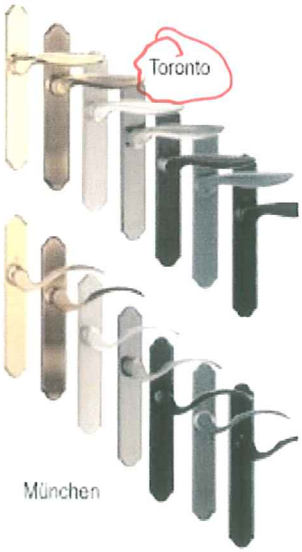
Integral Shades:
Soft, pleated shades within the insulating glass unit

- No dusting
- No cords...
- ...and no interference by little hands or feet

STYLES/DESIGNS

STYLES/DESIGNS

HANDLES & LOCKS



- One single bore (as standard, prepped for one 2-
bore with 2-3/8" or 2-3/4" backset with a 1" cross bo
strike prep made to frame)

Options:

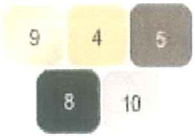
- Stainless steel, multi-point locking hardware on s
the following handles:
  - Toronto handle set (top row)
  - München handle set (bottom row)
- OR Nobilus hardware is available for Kolbe door
- No boring
- Custom boring
- Keyed lock

Toronto & München Handle Set Colors (left to rig
vary by color):
Bright Brass
Antique Brass
Satin Nickel
Antique Nickel
Oil-Rubbed ("living finish" may change with use)
Rustic Umber
Matte Black

NOTE: Actual colors may appear different than sho
select colors using samples from your dealer.

OPERATING HARDWARE

> 4x4 Steel Hinges with a Security Tab (standard)
Colors 9, 5, 8, 10
> 4x4 Spring Hinges (option) Colors 9, 5, 8, 10



> 4x4 Ball Bearing Hinges (option) Colors 9, 4
> Adjustable Hinges (option)

Hinge Colors:
9 - Yellow Zinc (standard)
4 - Bright Brass
5 - Antique Brass
8 - Oil-Rubbed (this is a "living finish" that will patina
10 - Dull Chrome
Prices may vary depending on color selected.

NOTE: Actual colors may appear different than show
select colors using samples from your dealer.

GLASS

- Dual-insulating glass units with LoE coating for energy efficiency

EXTERIOR FINISH

FLUOROPOLYMER COLORS
STANDARD

SPECIALTY

Unfinished (standard on both door frame & panel)

Factory-Applied Stain (option door panels only; no
COLORS: *(view colors below, under Interior Finish)*
Wheat, Light Oak 998, Sunset Oak, Chestnut, Cherr

K-Kron II high performance finish
(option, door frames and/or panels) +
- 31 standard colors *(view colors below, under Inte*
- Protective finish
- 10-Year Film Integrity Warranty

Extruded Aluminum Cladding with Fluoropolyme
inswing door frames only, not panels) +
- 13 standard colors
- 19 specialty colors (*)
- Durable finish meets performance requirements
- 30-Year Warranty

STANDARD COLORS: *(left to right; click image to e*
Row 1: Ultra Pure White, Abalone, Beige, Sand, Nat
Row 2: Rustic, Gingersnap, Coal Black, Hartford Gre
Row 3: Patriotic Blue, Merlot, Chutney, Slate
SPECIALTY COLORS: *(may incur additional charge lead times)*
Row 4: White, Alabaster, Spiced Vinegar
Row 5: Green Tea Leaf, Frosted Jade, Mystic Ivy, B
Row 6: Timberwolf, Waterford, Cape Cod, Kiwi, Butt
Row 7: Truffle, Manchester, Mudpie, Camel, Pumpki

Custom colors available
Monitor colors vary, so please make selections usin

INTERIOR FINISH

Unfinished (standard on both door frame & panel)

Factory-Applied Stain (option door panels only; no
COLORS: *(left to right; click image to enlarge)*
Wheat, Light Oak 998, Sunset Oak, Chestnut, Cherr

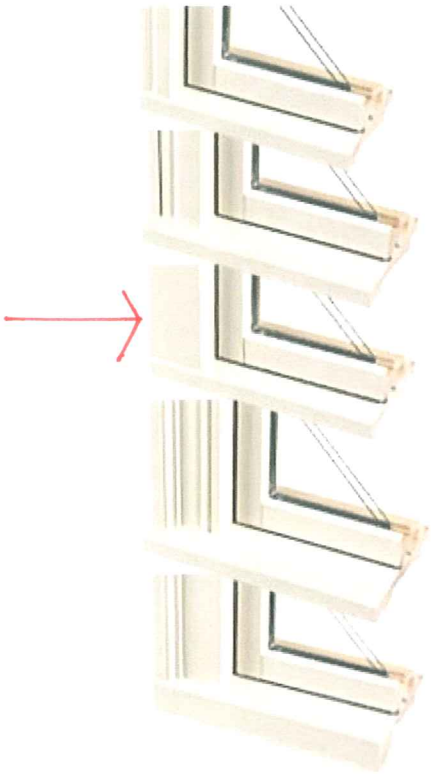
K-Kron II high performance finish
(option, door frames and/or panels) +
- 31 standard colors
- Protective finish
- 10-Year Film Integrity Warranty

COLORS *(left to right; click image to enlarge)*
Row 1: Beige, Sand
Row 2: Spiced Vinegar, Bay Leaf, Hartford Green, G

Row 3: Rustic, Merlot, Chutney, Slate, Patriotic Blue
Row 4: Alabaster, White, Ultra Pure White, Abalone,
Row 5: Frosted Jade, Basil, Mystic Ivy, Antique Red
Row 6: Timberwolf, Waterford, Cape Cod, Buttersco
Row 7: Mudpie, Manchester, Truffle, Camel, Pumpki

Custom colors available
Monitor colors vary, so please make selections usin

EXTERIOR TRIM, WOOD FRAME UNITS



Exterior Wood Trim (top to bottom):

- 1-15/16" Profiled Brickmould (standard) shown w Nosing

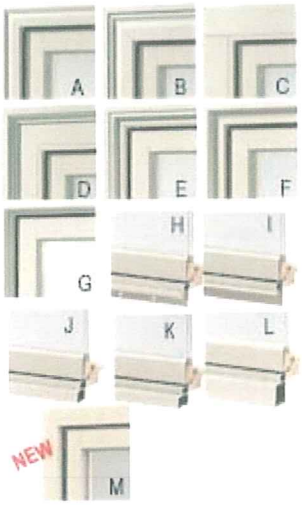
Options:

- 3-1/2" Profiled Brickmould shown with 2-3/4" Sill
- 3-1/2" Flat Casing shown with 2" Sill Nosing
- 3-1/2" Profiled Brickmould with Backband shown Nosing
- 3-1/2" Flat Casing with Backband shown with His

Learn More about Exterior Wood Trim, Nosing, and Accessories

EXTERIOR TRIM OPTIONS, CLAD FRAME UNITS

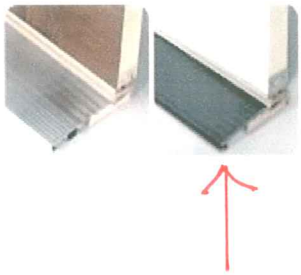
Extruded Aluminum Trim Options (outswing doors o
A - 1-15/16" profiled brickmould
B - 3-1/2" profiled brickmould
C - 3-1/2" flat casing
D - 3-1/2" flat casing with backband
E - Historic brickmould
F - Bullnose brickmould
G - Ogee casing
H - Traditional sill nosing (available w/ A, B & C)
I - Sill drip (available w/ A, B & C)
J - 1-5/8" projected sill nosing (available w/ A, B & C
K - 2-1/8" projected sill nosing (available w/ D, F & G
L - 2-1/8" historic sill nosing (standard w/ E)



M - 2" flat casing

Learn More about Extruded Aluminum Trim

SILL



- Bronze anodized adjustable sill with a hardwood mill finish is optional, shown far left)

Options:

- Bronze anodized weep sill (shown right; inswing
- Bronze anodized handicap sill with or without a th 4-9/16" or 6-9/16" jambs only; deduct 5/8" from the s height)
- Continuous Sill (select inswing units only; head ja continuous)
- No sill

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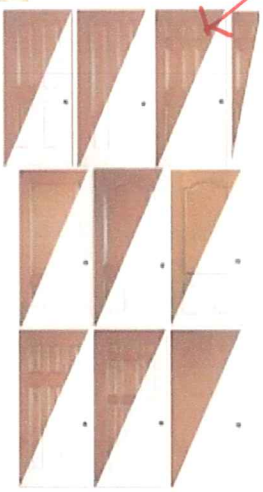
Garage to Exterior
Kitchen to Garage

BASIC FIBERGLASS DOORS (NO GLASS LITES)

STYLES/DESIGNS



FW / FEW = Wood Grain Texture; FE = Smooth Skin
{Sizes are listed in brackets}

Top row, left to right:
FEW-369† / FE-369†: 4 raised panels {2-8 x 6-8; 3-0 x 6-8}
FEW-349† / FE-349†: 4 raised panels (2 tall over 2 short) {2-8 x 6-8; 3-0 x 6-8}
FEW-109† / FE-109†: 6 raised panels (2 short over 2 tall over 2 tall) {2-6 x 6-8; 2-8 x 6-8; 3-0 x 6-8; 3-0 x 8-0}
FEWSL-109 / FESL-109: 3-panel sidelite to match 6-panel door {1-0 x 6-8; 1-2 x 6-8}

Middle row, left to right:
FEW-113† / FE-113: 3 raised panels (1 tall over 2 short) {3-0 x 6-8}
FEW-103† / FE-103†: 3 raised panels (1 tall with arch top & bottom detail over 2 short with arch top detail) {3-0 x 6-8}
FEW-370 / FE-370: 3 raised panels (1 tall with arch top detail over 2 short {2-8 x 8-0; 3-0 x 8-0}

Bottom row, left to right:
FEW-366† / FE-366†: Six raised panels (3 short over 3 tall; available with optional dentil shelves, see below) {3-0 x 6-8}
FEW-159† / FE-159: Nine raised panels (3 short with arch top detail over 3 tall over 3 taller) {2-8 x 6-8; 3-0 x 6-8}
FW-1† / F-1†: Flush face (no panels) {2-6 x 6-8; 2-8 x 6-8; 3-0 x 6-8; 2-6 x 8-0; 2-8 x 8-0; 3-0 x 8-0}

† These doors have received Hallmark certification (413-H-894.00) & Florida Building approval [FL#8603.8 (04)]. The testing was performed in accordance with ASTM E330 for structural performance only; air & water performance wer not tested. Tested units had extruded aluminum clad frames with 4-9/16" jambs, adjustable sills, 4" x 4" hinges, and inswing operation. Extruded frames with jambs of 5-9/16", 6-9/16", 6-11/16" and 7" qualify as well. Trim options do not affect certification.

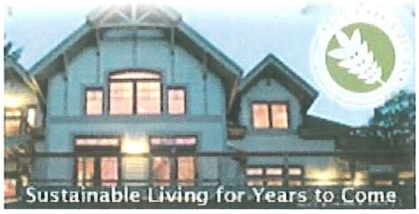
HANDLES & LOCKS

- One single bore (as standard, prepped for one 2-1/8" face lock bore with 2-3/8" or 2-3/4" backset with a 1" cross bore; 2-1/4" lock strike prep made to frame)

Options:
- Stainless steel, multi-point locking hardware on single doors with the following handles:
  - Toronto handle set (top row)
  - München handle set (bottom row)
- OR Nobilus hardware is available for Kolbe doors
- No boring
- Custom boring
- Keyed lock

Toronto & München Handle Set Colors (left to right; prices may vary by color):
Bright Brass
Antique Brass
Satin Nickel

GREEN BUILDING



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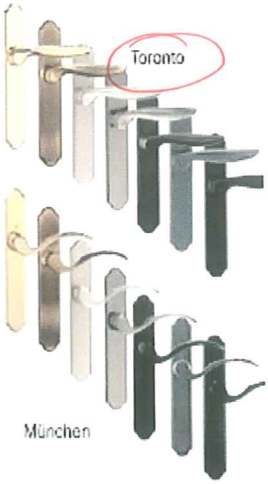


Antique Nickel
Oil-Rubbed ("living finish" may change with use)
Rustic Umber
Matte Black

NOTE: Actual colors may appear different than shown here; please select colors using samples from your dealer.

OPERATING HARDWARE

> 4x4 Steel Hinges with a Security Tab (standard) Colors 9, 5, 8, 10
> 4x4 Spring Hinges (option) Colors 9, 5, 8, 10
> 4x4 Ball Bearing Hinges (option) Colors 9, 4
> Adjustable Hinges (option)

Hinge Colors:
9 - Yellow Zinc (standard)
4 - Bright Brass
5 - Antique Brass
8 - Oil-Rubbed (this is a "living finish" that will patina over time)
10 - Dull Chrome
Prices may vary depending on color selected.

NOTE: Actual colors may appear different than shown here; please select colors using samples from your dealer.

EXTERIOR FINISH

FLUOROPOLYMER COLORS
STANDARD

SPECIALTY

Unfinished (standard on both door frame & panel)

Factory-Applied Stain (option door panels only; not frames)
COLORS: *(view colors below, under Interior Finish)*
Wheat, Light Oak 998, Sunset Oak, Chestnut, Cherry

K-Kron II high performance finish
(option, door frames and/or panels) +

- 31 standard colors *(view colors below, under Interior Finish)*
- Protective finish
- 10-Year Film Integrity Warranty

Extruded Aluminum Cladding with Fluoropolymer Finish (option, inswing door frames only, not panels) +

- 13 standard colors
- 19 specialty colors (*)
- Durable finish meets performance requirements of AAMA 2605-05
- 30-Year Warranty

STANDARD COLORS: *(left to right; click image to enlarge)*
Row 1: Ultra Pure White, Abalone, Beige, Sand, Natural Cotton
Row 2: Rustic, Gingersnap, Coal Black, Hartford Green, Bay Leaf
Row 3: Patriotic Blue, Merlot, Chutney, Slate
SPECIALTY COLORS: *(may incur additional charges and/or longer lead times)*
Row 4: White, Alabaster, Spiced Vinegar
Row 5: Green Tea Leaf, Frosted Jade, Mystic Ivy, Basil, Antique Red
Row 6: Timberwolf, Waterford, Cape Cod, Kiwi, Butterscotch
Row 7: Truffle, Manchester, Mudpie, Camel, Pumpkin Spice

Custom colors available
Monitor colors vary, so please make selections using actual samples.

INTERIOR FINISH

Unfinished (standard on both door frame & panel)

FIBERGLASS STAIN COLORS

Factory-Applied Stain (option door panels only; not frames)
COLORS: *(left to right; click image to enlarge)*
Wheat, Light Oak 998, Sunset Oak, Chestnut, Cherry

K-KRON II COLORS

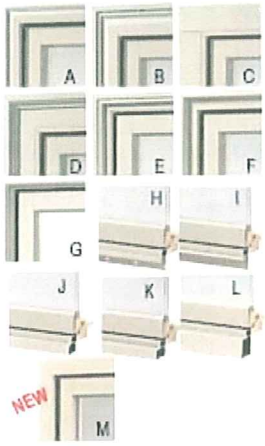
K-Kron II high performance finish
(option, door frames and/or panels) +

- 31 standard colors
- Protective finish
- 10-Year Film Integrity Warranty

COLORS *(left to right; click image to enlarge)*
Row 1: Beige, Sand
Row 2: Spiced Vinegar, Bay Leaf, Hartford Green, Gingersnap
Row 3: Rustic, Merlot, Chutney, Slate, Patriotic Blue
Row 4: Alabaster, White, Ultra Pure White, Abalone, Natural Cotton
Row 5: Frosted Jade, Basil, Mystic Ivy, Antique Red, Green Tea Leaf
Row 6: Timberwolf, Waterford, Cape Cod, Butterscotch, Kiwi
Row 7: Mudpie, Manchester, Truffle, Camel, Pumpkin Spice

Custom colors available
Monitor colors vary, so please make selections using actual samples.

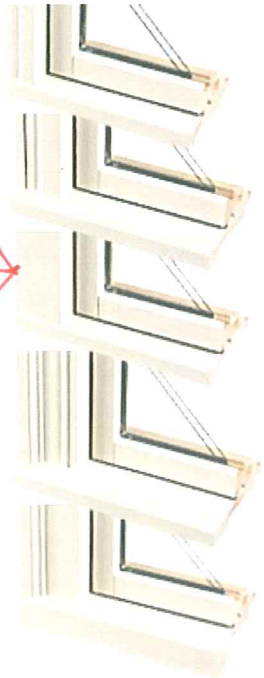
EXTERIOR TRIM OPTIONS, CLAD FRAME UNITS



Extruded Aluminum Trim Options (outswing doors only):
A - 1-15/16" profiled brickmould
B - 3-1/2" profiled brickmould
C - 3-1/2" flat casing
D - 3-1/2" flat casing with backband
E - Historic brickmould
F - Bullnose brickmould
G - Ogee casing
H - Traditional sill nosing (available w/ A, B & C)
I - Sill drip (available w/ A, B & C)
J - 1-5/8" projected sill nosing (available w/ A, B & C)
K - 2-1/8" projected sill nosing (available w/ D, F & G)
L - 2-1/8" historic sill nosing (standard w/ E)
M - 2" flat casing

Learn More about Extruded Aluminum Trim

EXTERIOR TRIM, WOOD FRAME UNITS



Exterior Wood Trim (top to bottom):

- 1-15/16" Profiled Brickmould (standard) shown with Standard Sill Nosing

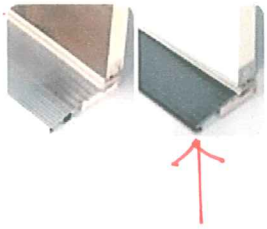
Options:

- 3-1/2" Profiled Brickmould shown with 2-3/4" Sill Nosing
- 3-1/2" Flat Casing shown with 2" Sill Nosing
- 3-1/2" Profiled Brickmould with Backband shown with 2-3/4" Sill Nosing
- 3-1/2" Flat Casing with Backband shown with Historic Sill Nosing

Learn More about Exterior Wood Trim, Nosing, and Decorative Accessories

SILL

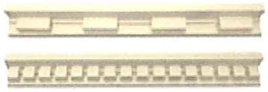
- Bronze anodized adjustable sill with a hardwood cap (standard;



mill finish is optional, shown far left)
Options:

- Bronze anodized weep sill (shown right; inswing doors only)
- Bronze anodized handicap sill with or without a thermal break (for 4-9/16" or 6-9/16" jambs only; deduct 5/8" from the standard RO height)
- Continuous Sill (select inswing units only; head jamb will not be continuous)
- No sill

OTHER OPTIONS



Dentil Shelves for craftsman style fiberglass doors (field application only):

- 4-block style shelf
- 16-block style shelf
- Material: high density polyurethane (HDP) (will not split, rot or warp)
- Oak grain texture can be stained or painted on the jobsite to match the door finish

Available on Basic Doors FE-366, FEW-366, as well as on doors with Oak Park or Paris glass patterns.

Product specifications & pricing are subject to change without notice.

The customer is responsible for verifying information before placing orders.

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09200-PART 1 – CEMENT PLASTER SYSTEM

1.1 SECTION INCLUDES

A. Refer to all drawings and other sections of this specification to determine the type and extent of work therein affecting the work of this section, whether or not such work is specifically mentioned herein.

B. System Description: Composite wall system consisting of SENERGY STUCCOBASE PREMIX and Finish Coat.

C. Senergy products are listed in this specification to establish a standard of quality. Any substitutions to this specification shall be submitted to and receive approval from the Architect at least 10 days before bidding. Proof of equality shall be borne by the submitter.

D. The system type shall be Stucco Wall System as manufactured by Degussa Wall Systems, Inc., Jacksonville, Florida.

1.2 REFERENCES

A. ASTM C150-99a Standard Specification for Portland Cement.

B. NER-676 National Evaluation Service Report NER-676.

C. ASTM C847-95 Standard Specification for Metal Lath.

D. ASTM C926-98a Standard Specification for Application of Portland Cement-Based Plaster.

E. ASTM C1032-96 Standard Specification for Woven Wire Plaster Base.

F. ASTM C1063-99 Standard Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster.

G. ICBO AC11 Cementitious Exterior Wall Coatings.

H. ESR 1064 ICC Evaluation Report ESR 1064.

1.3 SUBMITTALS

A. Samples:

1. Submit a 18.8 cm x 18.8 cm (7" x 7") sample for each finish color and texture specified.

1.4 QUALITY ASSURANCE

A. Qualifications:

1. The Stucco Wall System Applicator shall provide satisfactory evidence of his qualifications to apply the Stucco Wall System.

B. Design and Detailing a Stucco Wall System:

1. General:
   a. The system shall be installed in strict accordance with current recommended published details and product specifications from the system's manufacturer.
   b. Sealants and closed cell backer rod as required at dissimilar materials and expansion joints within the Stucco Wall System shall provide a complete watertight system.

c. Minimum slope for all projections shall be 1:2 with a maximum length of 30.5 cm (12") [e.g. 15 cm in 30.5 cm (6" in12")], unless other manufacturer-approved detailing is shown on the construction documents.

2. Substrate Systems:
   a. Deflection of the substrate systems shall not exceed L/360.
   b. Acceptable substrates are Fiberboard ANSI/AHA A194-85, Exposure I or exterior plywood (grade C-D or better) or Exposure I OSB,
   c. Acceptable substrates must be securely fastened per manufacturer recommendations and applicable building code requirements.
   d. Other substrates shall be approved by the system's manufacturer in writing prior to the application.
   e. The applicator shall verify that the proposed substrate is acceptable prior to the Stucco Wall System installation.
3. System Joints
   a. Expansion joints are required in the system where they exist in the substrate, where the system adjoins dissimilar construction, at changes in substrates and at floor lines in multilevel wood frame construction where substrates change and where structural movement is anticipated or as specified by the design professional.
   b. Control joints are required at a minimum of every 13.4 m2 (144 ft2) and as specified by the design professional. The maximum uncontrolled length or width is 5.5 lineal meters (18 lineal feet) and a maximum uncontrolled length to ratio of 2 1/2 : 1.
   c. Reference construction documents for specific locations.
4. Coordination with Other Trades
   a. Contractor shall evaluate adjacent materials such as windows, doors, etc. for conformance to manufacturer's details.

C. Evaluations, Listings, and Classifications

1. The Finish shall be tested as having a flame spread of less than or equal to 25.
2. The system shall be currently evaluated, listed and classified by the following agencies:
   a. I.C.B.O. Evaluation Report
   b. NES Evaluation Report

D. Code Approvals: The system shall be recognized for the intended use by applicable Building Codes.

1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver to the job site all materials in unopened, undamaged containers, clearly marked and identified with the system manufacturer's name and description of contents.

B. Store materials inside, or under cover and off the ground and keep them dry, protected from the weather, direct sun light, surface contamination, damaging temperatures, damage from construction traffic and other causes.

C. Store pail materials in temperatures not less than 4°C (104°F) or more than 43°C (110°F).

1.6 PROJECT/SITE CONDITIONS

A. Environmental Requirements: The contractor under this section shall verify site conditions to assure that the requirements of storage of materials and installation procedures conform to the system manufacturer's current product storage and application requirements as applicable to warranty conditions.

B. Protection of Work

1. Protect surrounding areas and surfaces during the application of the system.
2. The system shall be protected when work ceases for the day or when an area is completed so that water will not infiltrate behind the system or damage system materials.

1.7 SEQUENCING AND SCHEDULING

A. Coordinate and schedule installation of Stucco Wall System with related work of other sections

B. Coordinate and schedule installation of trim, flashing, and joint sealers to prevent water infiltration behind the system.

C. Coordinate and schedule installation of windows, doors, A/C units, air seals etc.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. All components of the Stucco Wall System shall be obtained from the system manufacturer or through an authorized distributor.

2.2 MATERIALS

A. STUCCOBOND: Surface applied bonding agent and additive for SENERGY STUCCOBASETM/STUCCOBASE PREMIX. (or approved equal)

B. POLY 1: 100% acrylic stucco additive.

1. Stucco System 3: 3/4"–7/8" thick stucco Metal Lath or Woven/Welded Wire: (See also, Senergy Lath & Trim Accessories system support bulletin) [Minimum No. 17 gauge, 25.4 mm (1") galvanized steel, woven wire fabric is required. Other laths shall comply with ASTM C933-80 (welded) and ASTM C1032-86 (woven). The lath is self-furred or furred when applied over all substrates except unbacked polystyrene.]

- OR -

[Expanded metal lath: The lath shall comply with ASTM C847-93. Furring and self-furring requirements shall be as set forth for wire-fabric lath. Minimum weight is 1.85 kg/m2 (3.4 lb/yd2) Other acceptable welded laths shall comply with ASTM C933-80 and other acceptable woven laths shall comply with ASTM C1032-86.]

C. Plaster Sand: Must be clean and free from deleterious amounts of loam, clay, silt, soluble salts and organic matter. Sampling and testing must comply with ASTM C144 or ASTM C897.

D. Water: Clean and potable without foreign matter.

E. STUCCOBASETM PREMIX: Factory-blended mixture of Portland cement, reinforcing fibers, sand, and other proprietary ingredients.

F. Reinforcing Mesh: MIL-Y-1140G; balanced open weave, glass fiber reinforcing mesh; twisted multi-end strands for compatibility with Senergy lamina components. Flexguard 4: Standard weight for use with ALPHA BASE COAT in reinforcing optional EPS shapes.

G. Senergy STUCCO PRIME: 100% acrylic-based primer for stucco.

H. SENERLASTIC® Finish: Elastomeric factory-mixed formulation of 100% acrylic polymers and aggregate, integrally pigmented and formulated for specific textures. Senergy SENERLASTIC Finish or approved equal.

2.3 ACCESSORIES

A. A secondary weather barrier must be installed over sheathed substrates and wrapped into rough openings prior to installation of the Senergy Stucco Wall System. Suitable secondary weather barriers include minimum two layers Grade D 60 minute paper are required by Uniform Building Code (UBC) for wood-based sheathings. Suitable materials for wrapping into rough openings include: SENERFLASHTM: 30-mil thick, self-sealing, self-healing rubberized asphalt laminated to a polyester fabric.

B. Fasteners: Comply with ASTM C1063 for type and size required to hold materials securely in place.

C. Trim: Casing bead, corner bead, expansion joint and weep screed accessories shall meet the requirements of ASTM C1063, galvanized, meeting ASTM A525 and ASTM A526, or zinc meeting ASTM B69. Zinc accessories are recommended where highly humid or salt-laden service conditions exist.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Installer shall examine substrates to determine if they are in satisfactory condition to receive the Senergy Stucco Wall System. A satisfactory substrate is one that complies section 1.4.4. B of this specification with requirements including installation tolerance of 6.4 mm in 3 m (1/4" in 10') (min) and of the sections in which the substrate and related work are specified. Installer shall submit a written report listing conditions detrimental to performance of work of this section. Do not proceed with installation of system until unsatisfactory conditions have been corrected.

Wall System

B. Wrap the secondary weather barrier into rough openings (doors, windows, etc.) to increase the level of protection to the building frame and interior.

C. Verify lath is installed in accordance with ASTM C1063 and all local building codes.

D. Unsatisfactory conditions shall be reported to the General Contractor and corrected before application of the Senergy Stucco Wall System.

3.2 PREPARATION

A. At the Architect's discretion, installer, system manufacturer's representative, installer of substrate material and other trades whose work affects the Senergy Stucco Wall System shall meet at project site to review procedures and time schedule proposed for installation of the system and coordination with related work.

B. Comply with stucco wall systems current published instructions for installation of Stucco Wall System as applicable to each type of substrate indicated.

3.3 MIXING

General: No additives are permitted unless specified in product mixing instructions. Close containers when not in use. Prepare in a container that is clean and free of foreign substances. Do not use a container which has contained or been cleaned with a petroleum-based product. Clean tools with soap and water immediately after use.

A. Acrylic Additive
   1. Mix POLY 1 with clean potable water in a ratio of from 1:1 to 1:3.

B. Stucco Base Coat: SENERGY STUCCOBASETM
   1. Use mixer which is clean and free of foreign substances.

2. Add 18.9–22.7 liters (5–6 gallons) of clean potable water or POLY 1, mixed at a 4:1 or 5:1 ratio, to mixer per one bag of SENERGY STUCCOBASE.
3. Add one bag of SENERGY STUCCOBASE.
4. Add one half 45.4–54.4 kg (100–120 lbs) of the required plaster sand (ASTM C144 or ASTM C897).
5. Mix for 3–4 minutes at normal mixing speed while adding the remainder 45.4–54.4 kg (100–120 lbs) of the plaster sand. Allow material to set for 2–4 minutes, then remix adding water to achieve desired consistency.

Note: Continuous mixing may cause excessive air entrainment.
- OR -

B. Stucco Base Coat: SENERGY STUCCOBASE PREMIX
1. Use mixer which is clean and free of foreign substances.
2. Add 7.6–9.5 liters (2–2.5 gallons) of clean potable water to mixer.
3. Slowly add one bag of SENERGY STUCCOBASE PREMIX.
4. Mix for one minute at normal mixing speed. Allow material to set for 2–4 minutes with mixing blades at rest. Then re-mix, adding water to achieve desired consistency. Desired consistency varies with type of application (trowel or gun), Substrate (paper-backed lath or block) and whether the stucco is applied to a wall or a ceiling.

Note: Continuous mixing may cause excessive air entrainment.

C. Senergy [SENERFLEX] [SENERLASTIC®] [STUCCO PRIME]
1. Thoroughly mix the factory-prepared material with a mixer to a homogeneous consistency.
2. A small amount of clean, potable water may be added to adjust workability.
3. Additives are not permitted.
4. Close container when not in use.
5. Clean tools with soap and water immediately after use.

3.4 APPLICATION

General: Apply Stucco Wall System materials in accordance with Senergy specifications.

A. Apply to approved substrates in accordance with manufacturer's instruction and government code requirements.

B. Metal lath
1. The metal lath shall be applied with minimum 13 mm (1/2") side laps and 25 mm (1") end laps.
2. When end laps occur between supports, lace or wire ties the ends of the sheets with 1.2 mm (0.0475") galvanized annealed steel wire.]
3. Refer to ASTM C1063 for additional information.
4. Corrosion-resistant fasteners for lath attachment shall penetrate a minimum of 25 mm (1") into wood framing.
5. Apply the System over steel framing [minimum No. 20 gauge, 0.912 mm (0.0359") thick]. Lath is secured to framing using No.8-18, S-12, panhead, self-tapping screws spaced a maximum of 152.4 mm (6 inches) vertical on center to studs.]

C. Trim junction

1. When two pieces of trim abut:
   a. Set intersection of trim in a minimum 100 mm (4") bed of acceptable low module trim sealant.
   b. Allow 3–5 mm (1/8"–3/16") gap between the abutting trim pieces. Do not overlap trim.
   c. Attach the trim in accordance with manufacturer's specifications. True expansion joints must be fastened to the structural substrate.

2. When two or more pieces of trim intersect:

a. The vertical trim piece shall be continuous with all horizontal pieces.
b. Miter all corners at intersections of trim.
c. Set intersection of trim in a minimum 100 mm (4") bed of acceptable low module trim sealant.
d. Allow 3–5 mm (1/8"–3/16") gap between the intersecting trim pieces. Do not overlap the trim.
e. Attach the trim in accordance with manufacturers' specifications. True expansion joints must be fastened to the structural substrate.

NOTE: Control joints are required at a minimum of every 13.4 m2 (144 ft2) and as specified by the design professional. The maximum uncontrolled length or width is 5.5 lineal meters (18 lineal feet) and a maximum uncontrolled length to ratio of 2 1/2 : 1.

D. SENERGY STUCCOBASETM/STUCCOBASE PREMIX Base Coat: Stucco Wall System 3 Application (3/4"–7/8" thickness)

1. Total thickness of base coats must meet code requirements for fire rated construction.
2. Nominal plaster Base Coat thickness:
   a. First coat "scratch": 3/8"–1/2"
   b. Second coat "brown": 3/8"–1/2"
3. Apply SENERGY STUCCOBASE/STUCCOBASE PREMIX mixture with sufficient force to develop full adhesion between SENERGY STUCCOBASE/STUCCOBASE PREMIX mixture and the substrate.
4. Apply first coat to completely embed lath. Cross rake slightly to provide key for second brown coat. Coat must be uniform in thickness.
5. Apply second brown coat to provide the required total thickness. Coat must be uniform in thickness. Rod off to desired thickness, leveled with screeds, to provide a true, flat plane. Follow this by wood floating or darbying the surface. Fill all voids and dress surface for acrylic finish.
6. Damp cure for at least 48 hours by lightly and evenly fogging the surface with water a least twice a day. Directsunlight, hot temperatures, low humidity and wind may make additional fogging necessary.

E. Senergy STUCCO PRIME

1. Apply STUCCO PRIME to the SENERGY STUCCOBASE/STUCCOBASE PREMIX with a sprayer, 10 mm (3/8") nap roller, or good-quality latex paint brush at a rate of approximately 4.3–6.7 m2 per liter (175–275 ft2 per gallon).
2. STUCCO PRIME shall be dry to the touch before proceeding to the Senergy Finish Coat application.

F. Senergy Finish Coat

[SENERLASTIC®]: [FINE]
1. Apply Finish directly to the SENERGY STUCCOBASE/STUCCOBASE PREMIX or STUCCO PRIME with a clean stainless steel trowel.
2. Apply and level finish during same operation to minimum obtainable thickness consistent with uniform coverage.
3. Maintain a wet edge on finish by applying and texturing continually over the wall surface.
4. Work finish to corners, joints, or natural breaks and do not allow material to set up within an uninterrupted wall area.
5. Float finish to achieve final texture.

3.5 CLEANING

A. Clean adjacent surfaces and remove excess material, droppings, and debris.

SECTION 09310 - CERAMIC TILE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Ceramic mosaic tile.
2. Glazed wall tile.
3. Waterproof membrane for thin-set tile installations.
4. Stone thresholds installed as part of tile installations.
5. Cementitious backer units.

1.3 DEFINITIONS

A. Module Size: Actual tile size (minor facial dimension as measured per ASTM C 499) plus joint width indicated.

B. Facial Dimension: Actual tile size (minor facial dimension as measured per ASTM C 499).

C. Facial Dimension: Nominal tile size as defined in ANSI A137.1.

1.4 PERFORMANCE REQUIREMENTS

A. Static Coefficient of Friction: For tile installed on walkway surfaces, provide products with the following values as determined by testing identical products per ASTM C 1028:

1. Level Surfaces: Minimum 0.6.

1.5 SUBMITTALS

A. Product Data: For each type of tile, mortar, grout, and other products specified.

B. Tile Samples for Initial Selection: Manufacturer's color charts consisting of actual tiles or sections of tiles showing the full range of colors, textures, and patterns available for each type and composition of tile indicated. Include Samples of accessories involving color selection.

C. Grout Samples for Initial Selection: Manufacturer's color charts consisting of actual sections of grout showing the full range of colors available for each type of grout indicated.

D. Samples for Verification: Of each item listed below, prepared on Samples of size and construction indicated. Where products involve normal color and texture variations, include Sample sets showing the full range of variations expected.

1. Full-size units of each type of trim and accessory for each color required.
2. Stone thresholds in 6-inch (150-mm) lengths.

E. Master Grade Certificates: For each shipment, type, and composition of tile, signed by tile manufacturer and Installer.

F. Product Certificates: Signed by manufacturers certifying that the products furnished comply with requirements.

G. Qualification Data: For firms and persons specified in the "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names of architects and owners, and other information specified.

H. Tile Test Reports: Indicate and interpret test results for compliance of special-purpose tile with specified requirements.

I. Setting Material Test Reports: Indicate and interpret test results for compliance of tile-setting and - grouting products with specified requirements.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: Engage an experienced installer who has completed tile installations similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.

B. Source Limitations for Tile: Obtain each color, grade, finish, type, composition, and variety of tile from one source with resources to provide products from the same production run for each contiguous area of consistent quality in appearance and physical properties without delaying the Work.

C. Source Limitations for Setting and Grouting Materials: Obtain ingredients of a uniform quality for each mortar, adhesive, and grout component from a single manufacturer and each aggregate from one source or producer.

D. Source Limitations for Other Products: Obtain each of the following products specified in this Section from one source and by a single manufacturer for each product:

1. Stone thresholds.
2. Cementitious backer units.
3. Joint sealants.
4. Waterproofing.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Comply with requirement of ANSI A137.1 for labeling sealed tile packages.

B. Prevent damage or contamination to materials by water, freezing, foreign matter, and other causes.

C. Handle tile with temporary protective coating on exposed surfaces to prevent coated surfaces from contacting backs or edges of other units. If coating does contact bonding surfaces of tile, remove coating from bonding surfaces before setting tile.

1.8 PROJECT CONDITIONS

A. Environmental Limitations: Do not install tile until construction in spaces is completed and ambient temperature and humidity conditions are being maintained to comply with referenced standards and manufacturer's written instructions.

1.9 EXTRA MATERIALS

A. Deliver extra materials to Owner. Furnish extra materials described below that match products installed, are packaged with protective covering for storage, and are identified with labels describing contents.

1. Tile and Trim Units: Furnish quantity of full-size units equal to 3 percent of amount installed, for each type, composition, color, pattern, and size indicated.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, those indicated in the ceramic tile installation schedules at the end of this Section.

B. Products: Subject to compliance with requirements, provide products indicated in the ceramic tile installation schedules at the end of this Section.

C. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

D. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Tile Products:
   a. Dal-Tile Corporation.
   b. Florida Tile Industries, Inc.
   c. Interceramics, USA.
   d. Mannington Ceramic Tile.

2. Tile-Setting and -Grouting Materials:

   a. American Olean Tile Company.
   b. Dal-Tile Corporation.
   c. DAP, Inc.
   d. Mapei Corporation.

2.2 PRODUCTS, GENERAL

A. ANSI Ceramic Tile Standard: Provide tile that complies with ANSI A137.1, "Specifications for Ceramic Tile," for types, compositions, and other characteristics indicated.

1. Provide tile complying with Standard Grade requirements, unless otherwise indicated.
2. For facial dimensions of tile, comply with requirements relating to tile sizes specified in Part 1 "Definitions" Article.

B. ANSI Standards for Tile Installation Materials: Provide materials complying with ANSI standards referenced in "Setting Materials" and "Grouting Materials" articles.

C. Colors, Textures, and Patterns: Where manufacturer's standard products are indicated for tile, grout, and other products requiring selection of colors, surface textures, patterns, and other appearance characteristics, provide specific products or materials complying with the following requirements:

1. Match colors, textures, and patterns indicated by referencing manufacturer's standard designations for these characteristics.

D. Mounting: Where factory-mounted tile is required, provide back- or edge-mounted tile assemblies as standard with manufacturer, unless another mounting method is indicated.

2.3 TILE PRODUCTS

A. Unglazed Ceramic Mosaic Tile: Provide factory-mounted flat tile complying with the following requirements:

1. Composition: Porcelain.
2. Module Size: As noted at end of specification section.

B. Glazed Ceramic Mosaic Tile: Provide factory-mounted flat tile complying with the following requirements:

1. Composition: Porcelain.
2. Module Size: As noted at end of specification section.

C. Trim Units: Provide tile trim units to match characteristics of adjoining flat tile and to comply with the following requirements:

1. Size: As indicated, coordinated with sizes and coursing of adjoining flat tile where applicable.
2. Shapes: As follows, selected from manufacturer's standard shapes:

a. Wainscot Cap for Thin-Set Mortar Installations: Surface bullnose.

D. Accessories for Glazed Wall Tile: Provide vitreous china accessories of type and size indicated and in color and finish to match adjoining glazed wall tile.

1. One soap holder for each shower indicated.

2.4 STONE THRESHOLDS

A. General: Provide stone thresholds that are uniform in color and finish, fabricated to sizes and profiles indicated to provide transition between tile surfaces and adjoining finished floor surfaces.

1. Fabricate thresholds to heights indicated, but not more than 1/2 inch (12.7 mm) above adjoining finished floor surfaces, with transition edges beveled on a slope of no greater than 1:2.

B. Granite Thresholds: Provide granite thresholds complying with ASTM C 615 requirements.

1. Match Architect's sample for color and finish.

2.5 WATERPROOFING FOR THIN-SET TILE INSTALLATIONS

A. General: Provide products that comply with ANSI A118.10 and the descriptions in this Article.

B. Polyethylene-Sheet Waterproofing: Manufacturer's standard proprietary product consisting of composite sheets, 60 inches (152 mm) wide by a nominal thickness of 6 mils, composed of an inner layer of non-plasticized, chlorinated polyethylene sheet faced on both sides with laminated, high-strength, nonwoven polyester material, designed for embedding in latex-portland cement mortar and as the substrate for latex-portland cement mortar setting bed.

2.6 SETTING MATERIALS

A. Portland Cement Mortar Installation Materials: Provide materials complying with ANSI A108.1A and as specified below:

1. Cleavage Membrane: polyethylene sheeting ASTM D 4397, 4.0 mils (0.1 mm) thick.
2. Reinforcing Wire Fabric: Galvanized, welded wire fabric, 2 by 2 inches (50.8 by 50.8 mm) by 0.062-inch (1.57-mm) diameter; comply with ASTM A 185 and ASTM A 82, except for minimum wire size.
3. Expanded Metal Lath: Provide diamond-mesh lath complying with ASTM C 847 for requirements indicated below:

   a. Base Metal and Finish for Interior Applications: Fabricate lath from uncoated or zinc-coated (galvanized) steel sheet, with uncoated steel sheet painted after fabrication into lath.
   b. Configuration over Solid Surfaces: Self-furring.
   c. Weight: 2.5 lb/sq. yd. (1.4 kg/sq. m).

4. Latex additive (water emulsion) described below, serving as replacement for part or all of gaging water, of type specifically recommended by latex additive manufacturer for use with job-mixed portland cement and aggregate mortar bed.

   a. Latex Additive: Manufacturer's standard.
   b. Latex Additive: Acrylic resin.

B. Latex-Portland Cement Mortar: ANSI A118.4, composed as follows:

1. Prepackaged Dry-Mortar Mix: Factory-prepared mixture of portland cement; dry, redispersible, ethylene vinyl acetate additive; and other ingredients to which only water needs to be added at Project site.

   a. For wall applications, provide nonsagging, latex-portland cement mortar complying with ANSI A118.4 for mortar of this type defined in Section F-2.1.2.

2. Mixture of Dry-Mortar Mix and Latex Additive: Mixture of prepackaged dry-mortar mix and liquid-latex additive complying with the following requirements:

a. Latex Additive: Acrylic resin.
b. For wall applications, provide nonsagging, latex-portland cement mortar complying with ANSI A118.4 for mortar of this type defined in Section F-2.1.2.

C. Organic Adhesive: ANSI A136.1, Type I.

2.7 GROUTING MATERIALS

A. Latex-Portland Cement Grout: ANSI A118.6 for materials described in Section H-2.4, composed as follows:

1. Factory-Prepared, Dry-Grout Mixture: Factory-prepared mixture of portland cement; dry, redispersible, ethylene vinyl acetate additive; and other ingredients to produce the following:

   a. Unsanded grout mixture for joints 1/8 inch (3.2 mm) and narrower.

2. Mixture of Dry-Grout Mix and Latex Additive: Mixture of factory-prepared, dry-grout mix and latex additive complying with the following requirements:

   a. Unsanded Dry-Grout Mix: Dry-set grout complying with ANSI A118.6 for materials described in Section H-2.3, for joints 1/8 inch (3.2 mm) and narrower.

2.8 ELASTOMERIC SEALANTS

A. General: Provide manufacturer's standard chemically curing, elastomeric sealants of base polymer and characteristics indicated that comply with applicable requirements of Division 7 Section "Joint Sealants."

B. Colors: Provide colors of exposed sealants to match colors of grout in tile adjoining sealed joints, unless otherwise indicated.

C. One-Part, Mildew-Resistant Silicone Sealant: ASTM C 920; Type S; Grade NS; Class 25; Uses NT, G, A, and, as applicable to nonporous joint substrates indicated, O; formulated with fungicide, intended for sealing interior ceramic tile joints and other nonporous substrates that are subject to in-service exposures of high humidity and temperature extremes.

D. Available Products: Subject to compliance with requirements, products which may be incorporated into the Work include, but are not limited to, the following:

E. Products: Subject to compliance with requirements, provide one of the following:

1. One-Part, Mildew-Resistant Silicone Sealants:

   a. Dow Corning 786; Dow Corning Corporation.
   b. Sanitary 1700; GE Silicones.
   c. Pecora 898 Sanitary Silicone Sealant; Pecora Corp.
   d. Rhodorsil 6B White; Rhone-Poulenc, Inc.
   e. Tremsil 600 White; Tremco, Inc.

2.9 CEMENTITIOUS BACKER UNITS

A. Provide cementitious backer units complying with ANSI A118.9, of thickness and width indicated below, and in maximum lengths available to minimize end-to-end butt joints.

1. Thickness: 1/2 inch (15.9 mm), where indicated.
2. Width: Manufacturer's standard width, but not less than 32 inches (813 mm).

B. Available Products: Subject to compliance with requirements, cementitious backer units that may be incorporated into the Work include, but are not limited to, the following:

C. Products: Subject to compliance with requirements, provide one of the following products:

1. The Original Wonderboard; Custom Building Products.
2. Wonderboard Multi+Board; Custom Building Products.
3. DomCrete Cementitious Tile-Backer Board; Domtar Gypsum.
4. Util-A-Crete Concrete Backer Board; FinPan, Inc.
5. DUROCK Cement Board; United States Gypsum Co.

2.10 MISCELLANEOUS MATERIALS

A. Trowelable Underlayments and Patching Compounds: Latex-modified, portland-cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated.

B. Tile Cleaner: A neutral cleaner capable of removing soil and residue without harming tile and grout surfaces, specifically approved for materials and installations indicated by tile and grout manufacturers.

2.11 MIXING MORTARS AND GROUT

A. Mix mortars and grouts to comply with referenced standards and mortar and grout manufacturers' written instructions.

B. Add materials, water, and additives in accurate proportions.

C. Obtain and use type of mixing equipment, mixer speeds, mixing containers, mixing time, and other procedures to produce mortars and grouts of uniform quality with optimum performance characteristics for installations indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of installed tile.

1. Verify that substrates for setting tile are firm; dry; clean; free from oil, waxy films, and curing compounds; and within flatness tolerances required by referenced ANSI A108 series of tile installation standards for installations indicated.
2. Verify that installation of grounds, anchors, recessed frames, electrical and mechanical units of work, and similar items located in or behind tile has been completed before installing tile.
3. Verify that joints and cracks in tile substrates are coordinated with tile joint locations; if not coordinated, adjust latter in consultation with Architect.

B. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Remove coatings, including curing compounds, and other substances that contain soap, wax, oil, or silicone and are incompatible with tile-setting materials by using a terrazzo or concrete grinder, a drum sander, or a polishing machine equipped with a heavy-duty wire brush.

B. Provide concrete substrates for tile floors installed with dry-set or latex-portland cement mortars that comply with flatness tolerances specified in referenced ANSI A108 series of tile installation standards for installations indicated.

1. Use trowelable leveling and patching compounds per tile-setting material manufacturer's written instructions to fill cracks, holes, and depressions.
2. Remove protrusions, bumps, and ridges by sanding or grinding.

C. Blending: For tile exhibiting color variations within the ranges selected during Sample submittals, verify that tile has been blended in the factory and packaged so tile units taken from one package show the same range in colors as those taken from other packages and match approved Samples. If not factory blended, either return to manufacturer or blend tiles at Project site before installing.

D. Field-Applied Temporary Protective Coating: Where indicated under tile type or needed to prevent adhesion or staining of exposed tile surfaces by grout, protect exposed surfaces of tile against adherence of mortar and grout by precoating them with a continuous film of temporary protective coating indicated below, taking care not to coat unexposed tile surfaces:

1. Petroleum paraffin wax, applied hot.
2. Grout release.
3. Petroleum paraffin wax or grout release.

3.3 INSTALLATION, GENERAL

A. ANSI Tile Installation Standards: Comply with parts of ANSI A108 series of tile installation standards in "Specifications for Installation of Ceramic Tile" that apply to types of setting and grouting materials and to methods indicated in ceramic tile installation schedules.

B. TCA Installation Guidelines: TCA's "Handbook for Ceramic Tile Installation." Comply with TCA installation methods indicated in ceramic tile installation schedules.

C. Extend tile work into recesses and under or behind equipment and fixtures to form a complete covering without interruptions, unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.

D. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.

E. Jointing Pattern: Lay tile in grid pattern, unless otherwise indicated. Align joints when adjoining tiles on floor, base, walls, and trim are the same size. Lay out tile work and center tile fields in both directions in each space or on each wall area. Adjust to minimize tile cutting. Provide uniform joint widths, unless otherwise indicated.

1. For tile mounted in sheets, make joints between tile sheets the same width as joints within tile sheets so joints between sheets are not apparent in finished work.

F. Lay out tile wainscots to next full tile beyond dimensions indicated.

G. Grout tile to comply with the requirements of the following tile installation standards:

1. For ceramic tile grouts (sand-portland cement, dry-set, commercial portland cement, and latex-portland cement grouts), comply with ANSI A108.10.

H. At showers and where indicated, install cementitious backer units and treat joints to comply with ANSI A108.11 and manufacturer's written instructions for type of application indicated.

3.4 WATERPROOFING INSTALLATION

A. Install waterproofing to comply with waterproofing manufacturer's written instructions to produce a waterproof membrane of uniform thickness bonded securely to substrate.

B. Do not install tile over waterproofing until waterproofing has cured and been tested to determine that it is watertight.

3.5 FLOOR TILE INSTALLATION

A. General: Install tile to comply with requirements in the Ceramic Tile Floor Installation Schedule, including those referencing TCA installation methods and ANSI A108 series of tile installation standards.

B. Joint Widths: Install tile on floors with the following joint widths:

1. Ceramic Mosaic Tile: 1/16 inch (1.6 mm).

C. Back Buttering: For installations indicated, obtain 100 percent mortar coverage by complying with applicable special requirements for back buttering of tile in referenced ANSI A108 series of tile installation standards:
1. Tile floors in wet areas, including showers, tub enclosures, laundries, and swimming pools.
2. Tile floors composed of rib-backed tiles.

D. Stone Thresholds: Install stone thresholds at locations indicated; set in same type of setting bed as abutting field tile, unless otherwise indicated.

1. Set thresholds in latex-portland cement mortar for locations where mortar bed would otherwise be exposed above adjacent nontile floor finish.

3.6 WALL TILE INSTALLATION

A. Install types of tile designated for wall installations to comply with requirements in the Ceramic Tile Wall Installation Schedule, including those referencing TCA installation methods and ANSI setting-bed standards.

B. Joint Widths: Install tile on walls with the following joint widths:

1. Ceramic Mosaic Tile: 1/16 inch (1.6 mm).
2. Wall Tile: 1/16 inch (1.6 mm).

C. Back Buttering: For installations indicated, obtain 100 percent mortar coverage by complying with applicable special requirements for back buttering of tile in referenced ANSI A108 series of tile installation standards:

1. Tile wall installations in wet areas, including showers, tub enclosures, laundries, and swimming pools.

3.7 CLEANING AND PROTECTING

A. Cleaning: On completion of placement and grouting, clean all ceramic tile surfaces so they are free of foreign matter.

1. Remove latex-portland cement grout residue from tile as soon as possible.
2. Unglazed tile may be cleaned with acid solutions only when permitted by tile and grout manufacturer's written instructions, but no sooner than 10 days after installation. Protect metal surfaces, cast iron, and vitreous plumbing fixtures from effects of acid cleaning. Flush surface with clean water before and after cleaning.
3. Remove temporary protective coating by method recommended by coating manufacturer that is acceptable to brick and grout manufacturer. Trap and remove coating to prevent it from clogging drains.

B. Finished Tile Work: Leave finished installation clean and free of cracked, chipped, broken, unbonded, and otherwise defective tile work.

C. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure tile is without damage or deterioration at the time of Substantial Completion.

1. When recommended by tile manufacturer, apply a protective coat of neutral protective cleaner to completed tile walls and floors. Protect installed tile work with kraft paper or other heavy covering during construction period to prevent staining, damage, and wear.
2. Prohibit foot and wheel traffic from tiled floors for at least 7 days after grouting is completed.

D. Before final inspection, remove protective coverings and rinse neutral cleaner from tile surfaces.

3.8 CERAMIC TILE WALL INSTALLATION SCHEDULE

A. Ceramic wall tile installation at shower location as per TCA, W244-03, provide 6 mil poloyethylene membrane in wet areas.

B. Ceramic tile wall tile installation bath locations as per TCA, B412-03

C. Ceramic Tile Wall Installation: Where interior wall installations is indicated, comply with the following:

1. Tile Type/Products: Wall tile as follows.

a. Dal-tile or equal, Style: Veranda (pattern as indicated on drawings) color as selected from manufacturers full range.
b. Sizes: 13"x13" 13"x20" 20"x20"
c. Trim: Cove base 6"x13"
Bullnose at top of wainscot: 4"x20"

Decorative border at shower: 3"x20" and 3"x3"

3.9 CERAMIC MOSAICS UNGLAZED FLOOR TILE INSTALLATION SCHEDULE

A. Ceramic tile floor installation at shower receptors and floors as per TCA, B415-03

B. Ceramic tile floor installation at all other locations as per TCA, F144-03

C. Ceramic Floor Tile Installation: Where interior floor tile installations is indicated, comply with the following:

1. Tile Type/Products: Floor tile as follows.

a. Dal-tile or equal, Style: Veranda (pattern as indicated on drawings) color as selected from manufacturers full range.
b. Sizes: 13"x13" 13"x20" 20"x20"

E. GROUT FOR FLOOR, Mapei, provide sealer on all tile grout.

END OF SECTION 09310

SECTION 09680 - CARPET

1.1 GENERAL

A. Submittals: As follows:

1. Product Data for each type of product indicated.
2. Samples for each product required.
3. Product schedule using same room and product designations indicated on Drawings and in schedules.
4. Maintenance data for carpet to include in maintenance manuals specified in Division 1.

B. Extra Materials: Furnish full-width rolls equal to 5 percent of amount installed for each type of carpet indicated, but not less than 10 sq. yd. (8.3 sq. m).

1.2 PRODUCTS

A. Carpet : As follows: State Contract Carpet

1.

Color and Pattern:	Bigelow Commercial or pre approved equal by other
Type:	Nova Matrix
Style	7959 Cast Aluminum
Pattern Loop	Looped
Fiber Brand:	DuPont Antron, Legacy Nylon
Dye Method:	Yarn Dyed
Protective Treatment:	DurTech Soli Release Technology
Pile Weight:	28.3oz/ sq.yd.
Weight Density	7026
Flaming Mode:	(ASTM E-648): Class I glue down
Static:	(AATCC-134):
Smoke Density:	ASTM E 662 – Less than 450
Warranty:	As per State Requirements, lifetime

B. Walk Off Mats : As follows:

1.

Lees, First Step	18"x18" square carpet tile walk off mats.
Amount:	80 square feet

C. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided by or recommended by **carpet manufacturer**.

D. Adhesives: Water-resistant, mildew-resistant, nonstaining type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet and that is recommended by **carpet manufacturer**

E. Tackless Carpet Stripping: Water-resistant plywood in strips as required to match cushion thickness and that comply with CRI 104, Section 11.3.

F. Seaming Cement: Hot-melt adhesive tape or similar product recommended by carpet manufacturer for taping seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.

G. Metal Edge Strips: Extruded aluminum with mill finish of width shown, of height required to protect exposed edge of carpet, and of maximum lengths to minimize running joints.

1.3 EXECUTION

A. Examine substrates, areas, and conditions for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet performance. Verify that substrates and conditions are satisfactory for carpet installation and comply with requirements specified.

1. Concrete Subfloors: Verify that concrete slabs comply with ASTM F 710 and slabs are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by **carpet manufacturer**

B. Preparation: Comply with CRI 104, Section 6.2, "Site Conditions; Floor Preparation," and carpet manufacturer's written installation instructions for preparing substrates indicated to receive carpet installation.

C. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, and depressions in substrates.

D. Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents.

E. Direct-Glue-Down Installation: Comply with CRI 104, Section 8, "Direct Glue-Down Installation."

F. Hook-and-Loop Installation: Comply with CRI 104, Section 10.5, "Hook and Loop Technology."

G. Stretch-in Installation: Comply with CRI 104, Section 11, "Stretch-in Installation."

H. Comply with carpet manufacturer's written recommendations for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. At doorways, center seams under the door in closed position.

1. Bevel adjoining border edges at seams with hand shears.
2. Level adjoining border edges.

I. Cut and fit carpet to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet manufacturer.

J. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.

K. Install pattern parallel to walls and borders.

L. Perform the following operations immediately after installing carpet:

1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet manufacturer.
2. Remove yarns that protrude from carpet surface.
3. Vacuum carpet using commercial machine with face-beater element.

M. Protect installed carpet to comply with CRI 104, Section 15, "Protection of Indoor Installations."

White Rocks Fish Hatchery
Two New Houses
Division of Facilities Construction Management
END OF SECTION 09680

SECTION 10801 - TOILET AND BATH ACCESSORIES

GENERAL

RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

SUMMARY

This Section includes the following:

Toilet and bath accessories.

SUBMITTALS

Product Data: Include construction details, material descriptions and thicknesses, dimensions, profiles, fastening and mounting methods, specified options, and finishes for each type of accessory specified.

Product Schedule: Indicating types, quantities, sizes, and installation locations by room of each accessory required. Use designations indicated in the Toilet and Bath Accessory Schedule and room designations indicated on Drawings in product schedule.

QUALITY ASSURANCE

Source Limitations: Provide products of same manufacturer for each type of accessory unit and for units exposed to view in same areas, unless otherwise approved by Architect.

COORDINATION

Coordinate accessory locations with other work to prevent interference with clearances required for access by disabled persons, proper installation, adjustment, operation, cleaning, and servicing of accessories.

WARRANTY

General Warranty: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

Manufacturer's Mirror Warranty: Written warranty, executed by mirror manufacturer agreeing to replace mirrors that develop visible silver spoilage defects within minimum warranty period indicated.

Minimum Warranty Period: 15 years from date of Substantial Completion.

PRODUCTS

MANUFACTURERS

Toilet and Bath Accessories: See specified accessories alternate must meet specified quality and construction. Pre-approval by architect prior to bidding.

MATERIALS

Mirror Glass: ASTM C 1036, Type I, Class 1, Quality q2, nominal 6.0 mm thick, with silvering, electroplated copper coating, and protective organic coating complying with FS DD-M-411.

Fasteners: Screws, bolts, and other devices of same material as accessory unit, tamper and theft resistant when exposed, and of galvanized steel when concealed.

FABRICATION

Surface-Mounted Toilet Accessories: Unless otherwise indicated, fabricate units with tight seams and joints, and exposed edges rolled. Provide concealed anchorage where possible.

Framed Glass-Mirror Units: Fabricate frames for glass-mirror units to accommodate glass edge protection material. Provide mirror backing and support system that permits rigid, tamper-resistant glass installation and prevents moisture accumulation.

EXECUTION

INSTALLATION

Install accessories according to manufacturers' written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated. Provide blocking in walls as needed for sufficient installation Toilet and Bath accessories.

Secure mirrors to walls in concealed, tamper-resistant manner with special hangers, toggle bolts, or screws. Set units level, plumb, and square at locations indicated, according to manufacturer's written instructions for substrate indicated.

ADJUSTING AND CLEANING

Adjust accessories for unencumbered, smooth operation and verify that mechanisms function properly. Replace damaged or defective items.

Remove temporary labels and protective coatings.

Clean and polish exposed surfaces according to manufacturers written recommendations.

TOILET AND BATH ACCESSORY SCHEDULE:

Mirror Unit, provide mirror unit complying with the following:
Stainless-Steel, Channel-Framed Mirror: Fabricate frame from stainless-steel channels in manufacturer's standard satin or bright finish with square corners mitered to hairline joints and mechanically interlocked.

At Bathrooms provide the following:

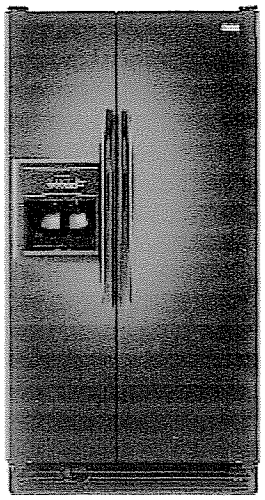
1. Provide one Tissue Holder: Danze or equal, Parma Series, D446232BN, Brushed Nickel
2. Provide one Hook at door: Danze or equal, Sonora Series, D442171BN, Brushed Nickel
3. Provide Three Towel Bars At Shown: Danze or equal, Parma Series, D446612BN, Brushed Nickel

At ADA shower Bathroom provide the following for all glass shower door:

1. Glass Shower Door: Chmi or equal, Pivot One Suite One, Pivot 1 Satin Nickel, number as required for door.
2. Glass Shower Door Handel: Chmi or equal, Pivot One Suite One, G0360 Satin Nickel
3. Glass Shower Door Stop: Chmi or equal,

END OF SECTION 10801

Sears



~~$1019.99 $1769.99~~
~~Save $250.00~~
thru 07/26/08
Rebate Details

Kenmore ELITE

Black Kenmore Elite 25.4 cu. ft. Side-By-Side Refrigerator with PuR® Ultimate II Ice and Water

Sears item# 04658969000 Mfr. model# 58969

Color:

Overall:	Black
Cabinet Color:	Black
Dispenser Color:	Black
Door Color:	Black
Handle Color:	Black

Capacity:

Freezer Section:	10 cu. ft.
Overall:	25.4 cu. ft.
Refrigerator Section:	15.4 cu. ft.

Dimensions:

Maximum Depth w/Handle:	33-7/8 in.
Height w/out Hinge:	68-7/8 in.
Maximum Height w/Hinge:	69-3/4 in.
Maximum Width:	35-1/2 in.
Depth w/out Handle:	32-1/8 in.

Filtration & Dispensing:

Dispenser:	Water/ice
Dispenser Light:	Yes, w/ automatic night light
Dispenser Lock-out:	Yes
Filter Life:	100 gallons
Ice Selection:	Crushed/cubed
Ice/Water Filter:	PuR® Ultimate II ice & water filtration
LCD Display:	No
Power Outage Indicator:	No
Water Filter Indicator:	Exterior, tri-color

Product images may differ from actual product appearance. Tires cannot be shipped to APO / FPO addresses.
Not all products are available at every Sears store. Online prices and promotions are for the continental U.S. only.

Water Filter Location: Base-grille

Durability:

Shelf Material:	Glass, spill-proof

Freshness Features:

Advanced Cooling System:	Ultra Fresh® w/SmartSense
Air Filtration:	No
Crispers:	1 humidity-controlled crisper
Crisper Style:	Clear
Snack/Deli Drawer:	Yes
Temperature Controlled Meat/Vegetab:	Yes, 1 (convertible)
Temperature Controlled Snack/Deli D:	No

Freezer Features:

Advanced Freezer Technology:	SmartSense temperature management system
Advanced Ice Production:	Acceler-Ice™
Defrost System:	Pulse Defrost
Ice Maker:	Yes
Space Saving Ice System:	SpaceSaver Ice™ system w/ice caddie

Freezer Conveniences:

Door Basket Style:	Plastic
Door Bin Style:	Plastic
Frozen Pizza Storage:	No
Slide-out Baskets:	1

General Features:

General Warranty:	1 year limited parts and labor

Performance:

Kilowatt Hrs. per Year:	617
Interior Lighting:	Enhanced
Sound Reduction:	QuietCool sound reduction package

Energy Star Compliant:	No
Refrigeration Conveniences:	
Adjustable Shelves:	3
Advanced Storage Options:	Fresh-n-Ready™ bin
Beverage Rack:	No
Clear Adjustable Door Bins:	2 gallon bins
Control Location:	Up-front interior
Control Type:	Electronic, temperature set point
Opaque Adjustable Door Bins:	0
Slide-Out Shelves:	2
Styling:	
Door Style:	Flat, textured
Type:	Side-by-Side

Sears

~~$1199.00 $1409.99~~
While quantities last
Intermediate markdowns may have been taken
Rebate Details

Kenmore ELITE

Black Kenmore Elite 30 in. Freestanding Gas Range

Sears item# 02279429000 Mfr. model# 79429

Product Overview:

See Owners Manual:	Click Here
Item Weight:	237.0 lbs.
General Warranty:	1 year parts and labor

Cooktop Controls:

Cleanability:	Dishwasher-safe pull-off control knobs
Location:	Manifold
Mechanical:	-
Safety/In-Use Indicator(s):	Hot surface indicator(s)

Gas Configuration:

No. of Burner Cooking Zones:	5
Burner Configuration:	Center: 9,500 BTU nat. /8,000 LP,Low output: one 5,000 BTU nat./4,500 LP,All-purpose: one 9,500 BTU nat./8,000 LP,High output: one 14,200 BTU nat./11,000 BTU LP,High output: one 17,200 BTU nat./14,000 BTU LP
Cleanability:	Dishwasher-safe removable grates
Design Look:	Deep recessed cooktop
Ease of Use:	Easy-to-grasp knobs
Grate Material:	Cast iron
Ignition:	Electronic ignition
Safety Features:	Cooktop control lockout
Type:	Sealed burners

Upper/Single Oven Configuration:

Product images may differ from actual product appearance. Tires cannot be shipped to APO / FPO addresses.
Not all products are available at every Sears store. Online prices and promotions are for the continental U.S. only.

No. of Oven Racks:	3 heavy duty, porcelain coated
No. of Rack Positions:	6
Bake Burner:	18,000 BTU Nat./16,000 LP
Broiler Burner:	13,500 BTU Nat./13,500 LP
Capacity:	5.0 cu. ft.
Cleanability:	Self-cleaning
Cleaning Method:	Select Clean™
Conv. Element Location:	Hidden behind back of oven
Convection Type:	Convection w/hidden assist element
Heating Type:	Standard (thermal) & convection
Ignition:	Electronic ignition
Interior Dimensions:	24-3/8 in. W x 17-5/8 in. D x 19-3/4 in. H
Light(s):	2 incandescent
Upper/Single Oven Safety:	
Access Control:	Oven control lockout
Upper/Single Oven Settings:	
Baking:	Standard baking,Convection baking
Broiling:	Variable temperature broil
Roasting:	Standard roasting,Convection roasting
Specialized Cooking:	Slow cook,Warm & hold,Add-1-minute,Recipe recall,Sabbath mode, Star-K certified
Type:	
Cooking Surface:	Gas: sealed burners
Oven(s) Controls:	
Clock Type:	Electronic touch control
Cook Timer:	Electronic touch control
Light(s) Control:	Auto/manual oven light
Location:	Backguard
Overall Type:	Easy Set™ 575 electronic control system

Oven Safety:

Heating System:	Automatic shut-off

Specialty Drawer:

Type:	Warming drawer

Convenience Features:

Key Conveniences:	Self-clean oven racks,Auto convection conversion

Quality Features:

Installation Aids:	Four adjustable leveling legs

Styling:

Cleanability:	Dishwasher-safe grates
Oven Door Window Type:	Extra-large Visualite® window

Color:

Backguard Console:	Black
Burner Grates:	Matte black
Cabinet Color:	Black
Control Dials/Knobs:	Black
Cooktop Surface:	Black
Handle Color:	Black
Door Panel(s):	Black
Drawer:	Black
Drawer Handle:	Black
Front Console:	Black
Overall:	Black

Dimensions:

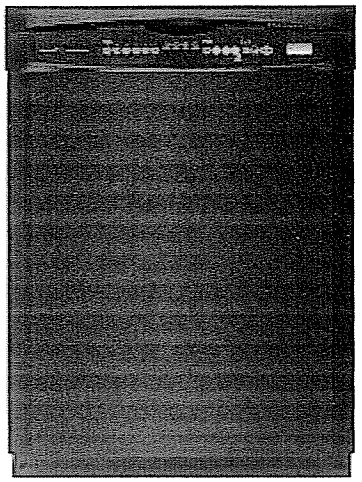
Depth:	28-13/32 in.
Height, Backguard Top:	48-1/2 in.
Weight, Shipping (Approx.):	237.0 lbs.
Maximum Width:	29-7/8 in.
Installation Instructions:	Click Here

Cutouts:

Considerations:	Never cut/modify cabinets

	w/o merchandise
Power Source:	
Convertibility:	Propane (LP) convertible, kit included
Max. Amp Load:	15
Power Source:	Gas
Installation Options & Tips:	
Considerations:	Instructions w/product take precedence
Included with Item:	
Pans & Racks:	Roasting rack,Searing grill,Griddle,Warming drawer rack
Installation Requirements:	
Anti-Tip Device:	Included with installation

Sears



~~$799.99 $699.99~~
~~Save $100.00~~
~~thru 07/26/08~~
Rebate Details

Black Kenmore Elite 24 in. Elite® Built-In Dishwasher w/ Ultra Wash HE Filtration

Sears item# 02213429000 Mfr. model# 13429

Color:

Door Panel(s):	Black
Overall:	Black
Console:	Black
Handle:	Black
Process Panel:	Black

Capacity:

Interior Size:	Giant Tub™
Third Rack:	No

Convenience Features:

Control Lockout:	Yes
Cycle Status Lights:	Yes
Quiet Package:	QuietGuard™ Ultra, 52 dBA
Cycle Countdown:	No
Detergent Dispenser:	Yes
Multiple Door Positions:	Yes, True Hold door
Rinse Aid Dispenser:	Yes
Rinse Aid Dispenser Indicator:	Yes
Start Button Memory:	Yes

Cleaning:

Sensor Washing:	SmartWash™
Advanced Technology:	TurboZone™ w/Rotating Spray Jets
Automatic Temperature Control:	Yes
Filter Cleaning:	Self-cleaning filter
Food Disposal:	Yes
Wash System:	Ultra Wash HE Filtration

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Wash Tower:	No
Water Filtration:	Yes
Dimensions:	
Depth w/Door Closed:	25-1/2 in.
Height:	34-1/2 in.
Width:	23-7/8 in.
Durability:	
Rack Material:	Nylon coated wire
Tub Material:	Stainless Steel
Efficiency:	
Kilowatt Hrs. per Year:	312
Annual Operating Cost, Estimated (E:	27
Annual Operating Cost, Estimated (G:	20
Energy Star Compliant:	Yes
General Features:	
Built-in Design:	Yes
Control Type:	Electronic
Accepts Custom Panel:	Yes
Door Style:	Hidden vent console with curved door
Fill & Drain Hose Included:	Yes, drain hose only
Portable Design:	No
Item Weight:	87.0 lbs.
General Warranty:	1 year limited parts and labor
Upper Rack Features:	
Adjustable:	Yes
Fold Down Tines:	Yes, 2 rows
Removable:	Yes
Small Item Holder:	Yes, cup shelf
Stemware Holder:	Yes
No Flip Clips:	Yes, 2
Lower Rack Features:	
Cutlery Holder:	No
Fold-down Tines:	Yes

Silverware Basket:	Yes
Silverware Basket w/Covers:	Yes
Silverware Basket Splittable:	Yes

Standard Cycles:

Normal:	Yes
Heavy:	No
Light Wash:	No
Number of Automatic Cycles:	6
Quick Rinse:	Yes

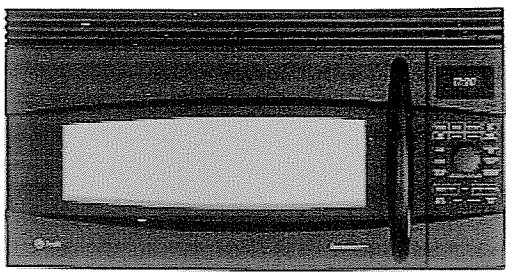
Special Cycles:

Quick Wash:	No
Unique or Exclusive:	Yes, SmartWash® HE
China, Gentle Wash:	Yes
Glassware:	No
Lower Rack Wash Only:	No
Plastic Items:	No
Plate Warmer:	No
Pots & Pans:	Yes
Upper Rack Wash Only:	No

Wash Rinse Options:

Delay Wash:	Yes, up to 6 hours
Cancel & Drain:	Yes
High Temp Rinse:	Yes
Hi-Temp Wash:	Yes
NSF Certified Rinse:	Yes
Pre Soak:	No
Sanitary Rinse:	Yes
Unique Wash:	No

Sears



Profile

Black-on-Black GE Profile 1.7 cu. ft. Microhood Combination with Convection Oven

Sears item# 02276069000 Mfr. model# JVM1790BK

	Microwave Controls:
Clock/Timer:	Clock, touch-controlled,Kitchen timer, touch-controlled
Digital Display Items:	Time, power level, oven function
Digital Display Type:	VFD, vacuum fluorescent display
Location:	Right side
Safety:	Child lockout
Type:	Electronic touch w/scrolling display
Vent:	3 speed
	Microwave Configuration:
Capacity:	1.7 cu. ft.
Exhaust Fan Capacity:	300 CFM
Heating Type:	CircuWave™ plus cooking system
Interior Dimensions:	21-5/9 in. W x 9-6/15 in. H x 14-1/4 in. D
Light(s):	Halogen
Performance:	Sensor cooking controls
Power Levels:	10
Racks:	Dual rack
Turntable:	Turntable on/off
Watts:	1000 watts
	Microwave Settings:
Convection Oven:	Yes
Convenience:	Help pad
Custom:	Micro Cook I & II
Defrost/Preheat:	Auto defrost,Time defrost
One Touch, Foods:	Rice,Meats,Potato,Chicken,Popcorn,Beverage,Vegetables
Sensor Cook:	Yes
Speed Cook:	No
Warm/Reheat:	Reheat-sensor
	Color:
Door Panel(s):	Black
Overall:	Black-on-Black

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Materials & Finishes:

Turntable:	Glass

Dimensions:

Depth:	15-3/8 in.
Height:	16-7/16 in.
Turntable Diameter:	13-3/5 in.
Maximum Width:	29-15/16 in.

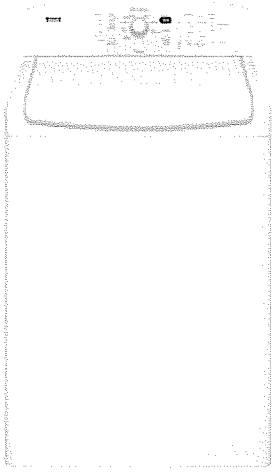
Installation Options & Tips:

Recommendations:	Instructions w/product take precedence

Included with Item:

Cookbooks:	Cookbook

Sears



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~~Save $100.00~~
~~thru 07/26/08~~
Rebate Details

White Kenmore Elite 3.9 cu. ft. King Size Capacity Washer

Sears item# 02628042000 Mfr. model# 28042

Capacity:

Interior Size (Washer):	3.9 cu. ft.

Cleaning:

Wash Motion:	Agitator
Advanced Technology:	Yes
Max. Spin Speed:	1000 rpm
Water Levels:	5 (4 plus auto)
Water Temperatures:	5 (3 w/ATC)

Dispensers:

Prewash Detergent Dispenser:	No
Detergent Dispenser:	Yes
Bleach Dispenser:	Timed Bleach™ Dispenser
Fabric Softener Dispenser:	Yes

Standard Cycles:

Normal:	Yes, timed
Heavy Duty:	Yes
Whites:	Yes, Whitest Whites
Soak:	Automatic
Delicate:	Yes
Permanent Press:	No

Special Cycles:

Silk:	No
Wool:	No
Handwash:	Ultra Handwash
Express Wash:	No
Large Items:	No
Sanitary:	No
Custom Program:	No
Unique or Exclusive:	No

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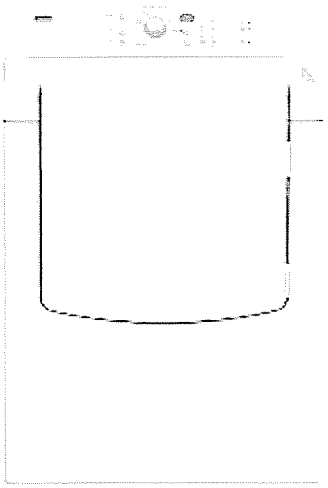
Light:	
Cycle Status Light:	Yes
Damp Dry Signal:	Yes
Door Window:	No
Drum Light:	Yes
End-of-Cycle Signal:	Yes
Quiet Package:	Quiet Pak™ 2
Durability:	
Top:	Painted steel
General Features:	
Height to Top of Control Panel:	42 in.
Power Source:	Gas
Controls:	High definition controls
Includes Dry Rack:	Yes
Space Management:	No
Overall Depth:	27-1/8 in.
Overall Width:	29 in.
Power Cord Included:	No
Stackable:	No
Venting Directions:	4-way venting option (rear, right, left, bottom)
Item Weight:	158.0 lbs.
General Warranty:	1 year parts and labor
Height, Console Top:	42 in.
Height, Cabinet Top:	35-1/4 in.

Sears



Rebate Details

White Kenmore Elite Oasis™ 6.8 cu. ft. Super Capacity Electric Dryer

Sears item# 02667042000 Mfr. model# 67042

Capacity:

Interior Size (Dryer): 6.8 cu. ft. IEC

Drying Technology:

Gentle Drying:	No
Moisture Sensing:	Yes
Temperatures:	5

Color:

Drum:	White
Overall:	White
Console:	White/silver

Standard Cycles:

Casual:	Yes
Damp Dry:	Yes
Delicate:	Yes
Heavy Duty:	Yes
Normal:	Yes
Permanent Press:	No
Timed Dry:	Yes, 90 min.

Special Cycles:

Air Dry:	No
Custom Cycle:	No
Express Dry:	Yes
Jeans:	No
Large Items:	No
Sensor Dry:	EvenHeat™
Touch Up:	No
Towels:	Yes
Ultra Delicate:	No
Wrinkle Reduction:	Wrinkle Guard® III

Convenience Features:

Check Lint Screen	Yes

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Cycle Options:

Delay Wash:	Yes, up to 9 hours
Prewash:	No
Extra Rinse:	Yes
Stain Treatment:	Yes
Energy Saver:	No

Efficiency:

Kilowatt Hrs. per Year:	500
Energy Star Compliant:	Yes

Convenience Features:

Control Lockout:	No
Quiet Package:	Quiet Pak™ II sound insulation
Add a Garment:	Yes
Cycle Status Lights:	Yes
Estimated Time Remaining Display:	Yes
End of Cycle Signal:	Yes

Durability:

Motor Spin Speeds:	Variable
Wash Basket Material:	Stainless Steel
Top and Lid Material:	Porcelain
Load Balancer:	No
Leveling Legs:	Yes

General Features:

Controls:	High definition controls
Depth with Door Closed:	27 in.
Maximum Width:	27-1/2 in.
Power Cord Included:	Yes
Fill and Drain Hoses Included:	Yes

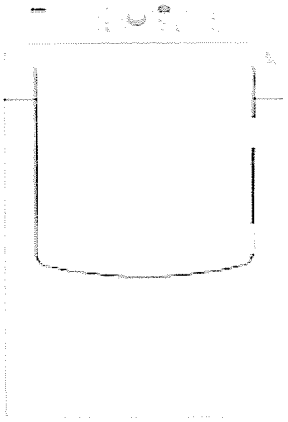
Color:

Overall:	White
Control Panel:	White
Tub Basket:	Stainless Steel

General Features:

General Warranty:	1 year parts and labor
Item Weight:	165.0 lbs.

Sears



~~$760.00 $860.00~~
~~Save $100.00~~
~~thru 07/26/08~~
Rebate Details

White Kenmore Elite Oasis™ 6.8 cu. ft. Super Capacity Gas Dryer

Sears item# 02677042000 Mfr. model# 77042

Capacity:

Interior Size (Dryer): 6.8 cu. ft.

Drying Technology:

Gentle Drying:	No
Moisture Sensing:	Yes
Temperatures:	5

Color:

Drum:	White
Overall:	White
Console:	White/silver

Standard Cycles:

Casual:	Yes
Damp Dry:	Yes
Delicate:	Yes
Heavy Duty:	Yes
Normal:	Yes
Permanent Press:	No
Timed Dry:	Yes, 90 min.

Special Cycles:

Air Dry:	No
Custom Cycle:	No
Express Dry:	Yes
Jeans:	No
Large Items:	No
Sensor Dry:	EvenHeat™
Touch Up:	No
Towels:	Yes
Ultra Delicate:	No
Wrinkle Reduction:	Wrinkle Guard® 60

Convenience Features:

Check Lint Screen	Yes

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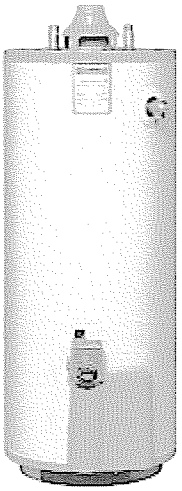
Light:	
Cycle Status Light:	Yes
Damp Dry Signal:	Yes
Door Window:	No
Drum Light:	Yes
End-of-Cycle Signal:	Yes
Quiet Package:	Quiet Pak™ 2
Durability:	
Top:	Painted steel
General Features:	
Height to Top of Control Panel:	42 in.
Power Source:	Electric
Controls:	High definition controls
Includes Dry Rack:	Yes
Space Management:	No
Overall Depth:	27-1/8 in.
Overall Width:	29 in.
Power Cord Included:	No
Stackable:	No
Venting Directions:	Rear, right, left, bottom
Venting Options:	4-way adaptable (kit needed for side & bottom)
Item Weight:	155.0 lbs.
General Warranty:	1 year parts and labor
Height, Console Top:	42 in.
Height, Cabinet Top:	35-1/4 in.

Sears



~~$100.00 Rebate Details~~

Kenmore Power Miser 9, 50 gallon Natural Gas Water Heater

Sears item# 04233916000 Mfr. model# 33916

Product Overview:

Series:	Power Miser 9
Tank Capacity:	50 gal.
See Owners Manual:	Click Here
Item Weight:	190.0 lbs.

Tank:

Anode:	1
Dip Tube:	PEX Roto-Swirl™
Insulation Material:	Foam
Insulation R Value:	16
Insulation Depth:	2 in.
Recovery at 90 Degree Rise:	42 g.p.h.
Tank Material:	Glass lined steel

Energy:

First Hour Rating:	80 gal.
Therms per Year:	254

Controls:

Temperature Adjustment:	External knob

Configuration:

Hourly BTU Input:	40,000
Gas Fuel Type:	Standard
Required Vent Size:	3 or 4 in.

Warranty:

Tank Warranty:	9 year limited
Parts Warranty:	9 year limited

Dimensions:

Height:	48-3/4 in.
Height with Diverter:	53-1/4 in.
Diameter:	24 in.

Power:

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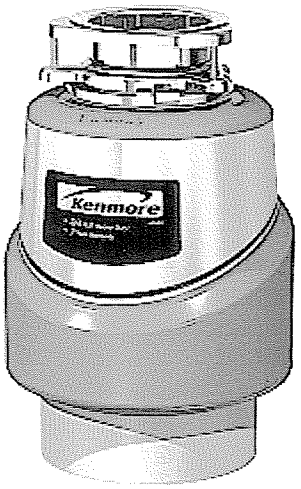
Type:	Gas
Gas Type:	Natural gas

Sears



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Kenmore

Kenmore 3/4 hp Food Waste Disposer

Sears item# 02260581000 Mfr. model# 60581

Product Overview:

Motor Horsepower:	3/4 hp
General Warranty:	7 years

Noise Reduction:

Sound Reduction Package:	Deluxe sound insulation

Performance Features:

Type of Feed:	Continuous-feed

Color:

Overall:	Silver

Materials & Finishes:

Grind Chamber Material:	Stainless Steel
Grind Elements Material:	Stainless Steel

Dimensions:

Height:	-

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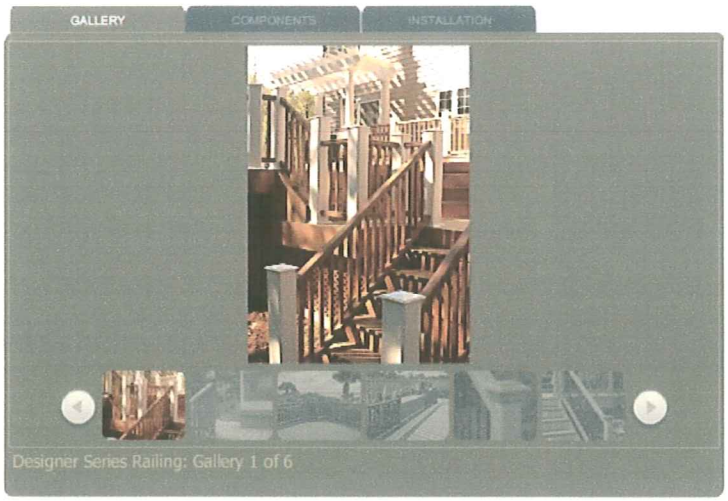

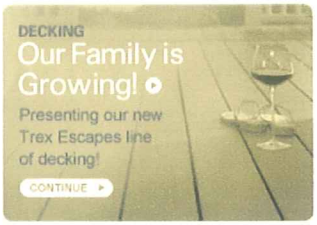

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- BURNISHED AMBER
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- WINCHESTER GREY
- SADDLE
- MADEIRA

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Railing

Top Rail (3.2" x 2.25")

Bottom Rail (2.75" x 2")

Baluster (1.375" x 1.375")

Rail Post (3.5" x 3.5")

Flat Post Cap (3.8" x 2.35")

Post Skirt (5.875" x 1.25")

Rail Post Sleeve (4.5" x 4.5")

Pyramid Post Cap (3.8" x 3")

Pyramid Post Sleeve Cap (4.5" x 3.125")

Post Sleeve Skirt (6.6" x 1.25")

Flat Post Sleeve Cap (4.5" x 2.35")

TrexExpress™ Designer Railing Tool For Post Sleeve (35.4" x 4.75")

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5/4x6
(1" x 5.5")

5/4x6 (Grooved)
(1" x 5.5")

1x12
(.75" x 11.375")

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Trex Trim Profiles

		CORNER WIDTH (NOMINAL)	
NOMINAL THICKNESS	ACTUAL THICKNESS	x4	x6
5/4"	1"	X	X

		BEAD BOARD WIDTH (NOMINAL)
NOMINAL THICKNESS	ACTUAL THICKNESS	x6
5/8"	1/2"	X

		BOARDS WIDTH (NOMINAL)					SHEET WIDTH (ACTUAL)
NOMINAL THICKNESS	ACTUAL THICKNESS	x4	x6	x8	x10	x12	x48"
1/2"	3/8"						X
5/8"	1/2"						X
3/4"	5/8"	X	X	X	X	X	X
1"	3/4"	X	X	X	X	X	X
5/4"	1"	X	X	X	X	X	X

Installation | Warranty | Care / Cleaning

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