



ADDENDUM NO. 2

December 4, 2017

Appoquinimink School District

Whitehall Elementary School – Bid Package 'A'

Page 1

NOTICE: Attach this addendum to the project manual for this project. It modifies and becomes a part of the contract documents. Work or materials not specifically mentioned herein are to be described in the main body of the specifications and as shown on the drawings. Bidders shall acknowledge receipt of this addendum on the space provided on the Bid Form. Failure to do so may subject the bidder to disqualification.

Whenever this Addendum modifies a portion of the Project Manual added information is shown as **Bold** and deleted information is shown as ~~striketrough~~.

The contract documents for the above referenced project, dated October 13, 2017 are amended as follows:

GENERAL CLARIFICATIONS:

1. The attached substitution for Draper gym equipment is approved.
2. The attached substitution for BTS Semes visual display units is approved.
3. The attached substitution for DMI Soffit Panels has been approved.
4. The attached substitution for DMI Formed Metal Roof Panels has been approved.

QUESTIONS AND ANSWERS: (1 – 27 answered in Addendum No. 1)

19. 1.) Tile specification identifies a 6.5" x 6.5" and a 13" x 13" Porcelain Tile, however it drawings and specifications do no identify locations or pattern of where this tile is to be installed. Please clarify.
- 2.) Specifications identify a "thick set" method, is this just for the quarry tile or for all tile floors?
- 3.) Specifications identify redguard waterproofing is to be installed. In what locations is this product to be installed? Is this product to be installed on all floors or just on the upper levels?
- 4.) Joint sizes for tile floors are not identified in specifications. Should a 1/8" joint be used in construction (per manufacturer)?
- 5.) Plans do not identify a floor tile pattern. Is tile to be installed in a "grid" pattern, or "running bond" similar to the wall installations?

Answer:

- 1.) Tile sizes addressed in Addendum #1 Modifications to Specifications item #8. For tile pattern see Addendum #2 Modifications to Specifications Item #10.
- 2.) See Addendum No. 2 Modifications to Specifications Item #10.





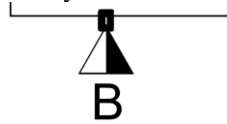
- 3.) See Addendum No. 2 Modifications to Specifications Item #10.
- 4.) Grout Joints will vary based on specific tile specified. As stated per 3.3F, Provide joint widths as recommended by tile manufacturer.
- 5.) See Addendum No. 2 Modifications to Specifications Item #10.
20. Please provide the location of panel CDP & Transformer T2 as shown on Drawing E5.2. Is this fed from the MDP panel?
Answer: See Addendum No. 2 Modifications to Drawings Item #16 e. Both located by "MDP" and fed from "MDP".
26. 1.) Ref. specification section 011100, Summary of Work, Ceramic Tile, page 54, #15, Protection. It is impossible to price policing the job site to maintain temporary protection after our work is completed and we are off the job. Can maintenance and removal of temporary protection from this bid package be assigned to the General Trades Contractor?
- 2.) Ref. specification section 012300, Alternates, No. 10 Ceramic Tile. We note the specification indicates the listed corridors are not to include tile in the base bid, however the finish schedule on drawing A3.7 indicates wall tile finishes. Are the wall tile finishes in the rooms listed in Alternate #10 to be included base bid?
- 3.) Ref. specification 093013, Tile, Page 4, paragraph 2.4, waterproofing membrane. The specifications note waterproofing membrane materials; however the installation method specified on page 10 does not indicate that waterproofing membrane is to be installed. Is waterproofing membrane to be installed? If so, where?
- 4.) Ref. specification 093013, Tile, Page 10, paragraph 3.8A, Interior Floor Installation. We note multiple installation methods are indicated for the floor tile however we find mention of where they are to be used. Are all floors to be installed using TCNA F113 (cementitious thinset mortar with cementitious grout)? If no, please advise other installation methods are to be used.

Answers:

- 1.) No. Contract A-14 Ceramic Tile must provide, maintain, and remove temporary protection as indicated.
- 2.) Follow the Alternate No. 10 direction. No wainscot tile in locations identified in Alternate #10 should be included in base bid. All tile installations where indicated in Alternate #10 shall be priced as Alternate #10 only.
- 3.) See Addendum No. 2 Modifications to Specifications Item #10.
- 4.) See Addendum No. 2 Modifications to Specifications Item #10.
28. 1.) Plan E5.2 Single line indicates an Alternate 16A but there is not an Alt 16A on the bid form.
- 2.) Plan E5.2 indicates a 2 section 400Amp panel for KP-1. The panel schedule on plan E6.6 shows it to be a 225A 1 section panel.



- 3.) Plan E3.6 has a voice/data outlet symbol with a sub letter E. What does the E require?
- 4.) Plan E3.6 has a voice/data outlet symbol with a sub letter B. What does the B require?
- 5.) Plan E5.1 is the Hubbel box to be a 2-gang HBL985 or a 4-gang box HBL987?
- 6.) Some of the systems are only requires a conduit stubbed into the ceiling in masonry block walls. Is this intended for all systems?
- 7.) Can you provide the contact number for the local power company? Can you provide the contact number for the local communications company?
- 8.) The Communications duct bank passes under the building, can the electric service duct bank pass under the building? If the electric service duct bank is run under the building, would this condition be code compliant?
- 9.) Is a Clock system to be included in Section 260771 Intercom/Telecommunication and Clock System?
- 10.) Please identify the use of the above symbol with the sub letter (also referenced in our



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- 11.) On plan E3.8 there is a note 1 that references speakers, on the floor plans there are 3 note 1's next to junction boxes with circuits coming from Panel KP-1 and one note one next to a speaker. Should the note 1 on Plan E3.9 be on E3.8?

Answers:

- 1.) See question #12 Response in Addendum #1. Omit Alternate #16.
 - 2.) 400A (2) section panel. See Addendum #2 SK – E - 039.
 - 3.) Refer to Addendum #1, SK – E - 27.
 - 4.) Refer to Addendum #1, SK – E - 035.
 - 5.) Refer to Addendum #1, SK – E - 026.
 - 6.) Refer to Scopes of Work Section 011100.
 - 7.) See question #8 response in Addendum #1.
 - 8.) No. As indicated on Drawings.
 - 9.) Refer to Addendum #1, see Modifications to Specifications item #23.
 - 10.) Ceiling wireless access point.
 - 11.) Refer to Addendum #2. The (3) note 1 with the junction box should be note 9.
29. Spec Sections 144200 Wheel Chari Lifts contains contradictory information. For example section 2.2A calls out an unenclosed vertical wheel chair platform lift, but 2.2A (1) calls out model CDE-60, which is an enclosed wheelchair lift. Additionally, the specified company (Wheel – O – Vator Co., Inc.) is no longer in business.

Answer: Wheel - O - Vator CDE-60 is considered a non-enclosed lift. We accept the substitution for Symmetry Elevating Solutions.



30. Please clarify Alternate #7 work associated with Contract A-20 Electrical. There are no electrical drawings detailing the work associated with Alternate #7. Specification Section 123000 does not state work to be performed by electrical contractor.

Answer: Refer to Addendum #1, See SK – E - 004.

31. Drawing L504 is on the playground. Please confirm that the fence around the playground is chain link with the exception of the one area detailed on CG101.

Answer: There will be two different types of barriers surrounding the playground area. The portion of barrier running parallel with and fronting the adjacent Mapleton Avenue will be a Street Screen Wall (without weep holes) with 3' tall decorative metal fencing and piers. The remaining fencing around the playground will be 5' tall decorative metal fence matching the street screen wall fencing. See attached highlighted excerpt from drawing CG101 for limits of playground barriers. Details for the street screen wall is provided on sheet L-501.

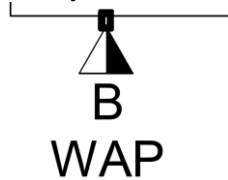
32. 1.) Spec Section 011100 Summary of Work, A-07 Metal Studs and Drywall, Item #20. Install metal decking at mansard trusses. Metal decking and trusses are to be supplied by steel contractor. There is no Specification for the CF Metal Trusses and usually these are supplied and installed by the CF Metal Stud Contractor.
- 2.) Spec Section 011100 Summary of Work, A-07 Metal Studs and Drywall, Item #30. All cost for barricades, arrows, pedestrian protection, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site. Is this for every contractor? Or only our delivery?
- 3.) Spec Section 011100 Summary of Work, A-07 Metal Studs and Drywall, Item #33. Provide Exterior Insulation Finish System (EIFS). There is no specification. At first glance, there appears to be none on the prints. Please verify none on project.
- 4.) Spec Section 011100 Summary of Work, A-07 Metal Studs and Drywall, Item #37. Indicates Steel contractor is supplying metal decking only, and nothing is mentioned about CF Metal Trusses. This is contradictory to Item #20.

Answers:

- 1.) Steel joist framing can be found in spec section 052100 provided in original bid pack.
- 2.) All contractors' scopes of work have the same referenced note. The intent of the note was that a flagger(s) will be needed for their individual work (the prime or their subcontractor deliveries) that they are responsible for. That said, if multiple trucks or deliveries occur, they must be coordinated with all trades as well as the Construction Manager and may require multiple flaggers.
- 3.) Section to be modified in Addendum #3. See modifications to Section 011100 Summary of Work, pages 38-39.
- 4.) Contract S-04 Structural Steel & Misc. Metals shall be responsible for providing section 053199 Steel Decking. Contractor A-06 Metal Studs and Drywall shall be responsible for providing Section 054000 Cold Formed Metal Framing except for note 2 found in Contract A-04 Structural Steel & Misc. Metals.



33. 1.) Please identify the use of the above symbol with the sub letter (also referenced in our



RFI 1.

- 2.) On plan E3.8 there is a note 1 that references speakers, on the floor plans there are 3 note 1's next to junction boxes with circuits coming from Panel KP-1 and one note one next to a speaker. Should the note 1 on Plan E3.9 be on E3.8?
- 3.) Is Transformer T2 and Panel CDP to be located in the Mechanical Rm C121?
- Answers:
- 1.) Refer to Addendum #2, Question #28 item #10.
- 2.) Refer to Addendum #2, Question #28 item #11.
- 3.) See Item #16 e under Modifications to Drawings. Both located by "MDP" and fed from "MDP".

34. 1.) Is the requirement for a Delaware Business License a separate License from the Electrical Contractor's License?
- 2.) Must we hold a Delaware Electrical Contractor's license prior to submitting a bid for this project? Or can we submit a bid and then apply for a reciprocal contractor's license / must reciprocal contractor's license be present prior to bid submission since the requirement for sub-contractors is within a 30 day time period (if hired more than 20 days after bidder entered contract- they would then have 10 days to submit their licensing)
- 3.) OR does the verbiage above only apply to the Business License?

Answers:

- 1.) The Delaware Business License is a separate license from the electrical contractors License.
- 2.) The electrical contractor must be in the process of attaining an electrical contractor's license at the date of bid submission. A sub-contractor agreement will not be finalized until the electrical contractor has attained an electrical contractor's license. Should the electrical contractor be unable to meet this requirement in conjunction with the project schedule, the bid will be rejected, and award will then be designated to the next lowest contractor.
- 3.) The verbiage above applies to the Delaware Business License.
35. Is BCI Burke an approved equal/alternate to Miracle Recreation Equipment Company?
- Answer: Yes BCI Burke is an approved equal/alternate.



36. Can item #30 in the concrete scope of work be a cost allowance price in the bid? This item is an unknown (maintaining specified tolerances), and trying to price it is impossible.
Answer: The following sentence has been deleted from Addendum #2 Section 011100 Summary of Work, Contract A-02 Concrete: "This contractor must maintain the specified tolerances as indicated in Section 033000." The concrete contractor will be evaluated on, and be required to, correct any installations of concrete that are determined to be outside of tolerance at the time of the inspection, not to maintain them after testing indicates the work is acceptable or the repairs were made and accepted by the Construction Manager.

37. 1.) Which package owns the 3/4" plywood shown on the inside of the Mansard roof detail?
2.) The bent plate at the trusses is normally supplied by the truss manufacturer for connection of trusses. Should the package furnishing the trusses supply the bent plate and the package installing the trusses install the bent plate?
3.) Which package owns the 5/8" roof sheathing on roof type R04?
4.) We assume the Roofing package owns the 5/8" sheathing and sleepers at roof type R454 is that correct?
5.) Which package owns the 1/2" wall sheathing behind the cementitious siding at wall type B65?
6.) Which package furnishes and installs the roof trusses?

Answers:

- 1.) The Carpentry & General Works Contractor shall provide all roof plywood & blocking unless specifically identified otherwise.
2.) The bent plates are to be provided by the Metal Stud & Drywall Contractor, as indicated in their scope of work under Item 39.
3.) The Carpentry & General Works Contractor shall provide all roof plywood & blocking unless specifically identified otherwise.
4.) The Roofing Contractor shall provide 5/8" roof sheathing & vented roof system as identified in Section R454 on A4.0. This is because it is a sandwiched system. Carpentry & General Works Contractor has no sheathing for this roof system.
5.) The Carpentry & General Works Contractor shall provide all roof plywood & blocking for the B65 wall system.

MODIFICATIONS TO SPECIFICATIONS:

1. SPECIFICATION SECTION 004100 Bid Form and Attachments Contract A-01 Sitework: DELETE pages 1 - 9 and REPLACE with revised pages attached to this addendum.
2. SPECIFICATION SECTION 004100 Bid Form and Attachments Contract A-07 Metal Studs and Drywall: DELETE pages 48 - 56 and REPLACE with revised pages attached to this addendum.





3. SPECIFICATION SECTION 004100 Bid Form and Attachments Contract A-08 Glass & Glazing: DELETE pages 57 - 63 and REPLACE with revised pages attached to this addendum.
4. SPECIFICATION SECTION 011100 Summary of Work: Contract A-02 Concrete, page 17, paragraph 30: Delete the following sentence; "This contractor must maintain the specified tolerances as indicated in Section 033000."
5. SPECIFICATION SECTION 011100 Summary of Work: Contract A-07 Metal Studs and Drywall, pages 38-39, Delete and replace with revised pages attached to this addendum.
6. SPECIFICATION SECTION 011100 Summary of Work: Contract A-09 Casework and Millwork, page 43, paragraph 7: Delete the following "Provide solid surface column wraps" and "Provide slotted aluminum picture rail where integral with solid surface wall covering."
7. SPECIFICATION SECTION 011100 Summary of Work: Contract A-09 Casework and Millwork, page 43, paragraph 8: Delete "Provide solid surface base." and Add "Solid surface base was eliminated. Any rubber base will be completed by the flooring contractor."
8. SPECIFICATION SECTION 074113.13 – FORMED METAL ROOF PANELS
Add Subparagraph 2.2 EXPOSED FASTENER, LAP SEAM, METAL PANELS
B.1: Add subletter **e. Dimensional Metals, Inc.**
9. SPECIFICATION SECTION 074293 – METAL SOFFIT PANELS
Add Subparagraph 2.2 METAL SOFFIT PANELS B.1: Add subletter **e. Dimensional Metals, Inc.**
10. SPECIFICATION SECTION 093013 – TILE
Delete Subparagraph 2.5.A in its entirety.
Delete Subparagraph 2.6.B in its entirety.
Revise Subparagraph 2.6 GROUT MATERIALS D.2: Revise subletter **c. Wall base in rooms where floors have epoxy.**
Add Subparagraph 2.6 GROUT MATERIALS D.2: Revise subletter **c. Wall base in rooms where floors have epoxy grout.**
Add Subparagraph 2.7 QUARRY TILE GROUT A.1: Add subletters **b. Thinset bond type; CEG Lite manufactured by Custom Building Products.** and **c. Thinset bond type; SpectraLock Pro manufactured by Laticrete.**
Delete Subparagraph 2.7.B in its entirety.
Revise Subparagraph 3.3 CERAMIC TILE INSTALLATION E. Jointing Pattern: Revise the first sentence to read **Lay wall tile in a brick pattern; lay floor and base tile in a standard grid pattern unless otherwise indicated.**
Revise Subparagraph 3.8 INTERIOR TILE INSTALLATION SCHEDULE, Replace subletter A.





with the following:

A. Interior Floor Installations

1. **Porcelain Tile on Concrete Subfloor Installation: TCNA F131.**
 - a. **Thinset Mortar: Water-Cleanable, Tile-Setting Epoxy.**
 - b. **Grout: Water-Cleanable Epoxy Grout.**
2. **Porcelain Tile on Elevated Subfloor Installation: TCNA F131A.**
 - a. **Fluid-Applied Membrane.**
 - b. **Thinset Mortar: Water-Cleanable, Tile-Setting Epoxy.**
 - c. **Grout: Water-Cleanable Epoxy Grout.**
3. **Quarry Tile Installation: TCNA F131A.**
 - a. **Thinset Mortar: Water-Cleanable, Tile-Setting Epoxy.**
 - b. **Grout: Water-Cleanable Epoxy Grout.**

11. SPECIFICATION SECTION 116800 – PLAY FIELD EQUIPMENT AND STRUCTURES Page 116800-1, Add “**Recreation Resource USA**” to the list of acceptable manufacturers in Part 1.3.A.

12. SPECIFICATION SECTION 144200 – WHEEL CHAIR LIFTS
Add Subparagraph 2.2 VERTICAL PLATFORM LIFT A.1: Add subletter **e. Symmetry Elevating Solutions.**

MODIFICATIONS TO DRAWINGS:

1. Drawing A3.3 – LOWER LEVEL PLAN – AREA “C”
 - a. Revise Kitchen layout to show new hand sink. Refer to sketch SK-A-007.
2. Drawing K-101 – KITCHEN EQUIPMENT PLAN
 - a. Revise Kitchen layout to show new hand sink. Refer to sketch SK-A-008.
 - b. Revise Equipment Schedule Item 17. Refer to sketch SK-A-009.
3. Drawing K-501 – FABRICATIONS
 - a. Revise Detail 17/K-501 WORKTABLE W/ HANDSINK. Refer to sketch SK-A-010.
4. SITE REVISIONS Refer to the attached SITE ADDENDUM NO. 1
5. STRUCTURAL REVISIONS Refer to the attached STRUCTURAL ADDENDUM NO. 1
 - i. Drawing M3.3, PARTIAL FIRST FLOOR DUCTWORK PLAN – AREA “C”
 - b. ADD note:





- i. “NOTE: KILN VENT SYSTEM SHALL BE DEPENDENT ON MANUFACTURER'S RECOMMENDATION AND MAY BE SUBJECT TO CHANGE WITH FINAL KILN SELECTION.”
 - ii. Drawing M9.1, ENLARGED MECHANICAL ROOM “C121” PLAN – AREA “C”
 1. RELOCATE 1 1/4" HWS/R away from electrical gear. Refer the attached Sketch SK-M-8.
6. Drawing P2.2, PARTIAL FIRST FLOOR BELOW SLAB PLUMBING PLAN – AREA “B”
 - a. CHANGE Area B Below Slab Connection of Sump Pump to Storm Drainage. Refer to the attached Sketch SK-P-9.
7. Drawing P2.3, PARTIAL FIRST FLOOR BELOW SLAB PLUMBING PLAN – AREA “c”
 - a. REVISE Plan through Kitchen Area. See attached revised drawing P2.3.
8. Drawing P3.1, PARTIAL FIRST FLOOR PLUMBING PLAN – AREA “A”
 - a. CHANGE fixture number in Toilet Rooms A136 and A135. Refer to attached Sketch SK-P-1.
 - b. CHANGE fixture number in Toilet Room A124. Refer to attached Sketch SK-P-1.
9. Drawing P3.2, PARTIAL FIRST FLOOR PLUMBING PLAN – AREA “B”
 - a. CHANGE fixture number in Toilet Room B131. Refer to attached Sketch SK-P-2.
10. Drawing P3.3, PARTIAL FIRST FLOOR PLUMBING PLAN – AREA “C”
 - a. CHANGE fixture number in Toilet Room C105. Refer to attached Sketch SK-P-3.
 - b. CHANGE piping layout entering Mechanical Room C121. Refer to attached Sketch SK-P-3.
11. Drawing P3.4, PARTIAL SECOND FLOOR PLUMBING PLAN – AREA “A”
 - a. CHANGE vent-through-roof location exiting Faculty Toilet A225. Refer to attached Sketch SK-P-4.
12. Drawing P3.5, PARTIAL SECOND FLOOR PLUMBING PLAN – AREA “B”
 - a. ADD Wall Cleanout to Faculty Toilet B214. Refer to attached Sketch SK-P-5.
 - b. CHANGE vent-through-roof location in Corridor B215. Refer to attached Sketch SK-P-6.
13. Drawing P4.1, OVERALL & GYM PLUMBING ROOF PLAN
 - a. CHANGE vent-through-roof location through Roof. Refer to attached Sketch SK-P-7.
 - b. CHANGE roof hydrant location. Refer to attached Sketch SK-P-8.
14. Drawing P9.1, ENLARGED KITCHEN EQUIPMENT PLAN – PLUMBING





- a. REVISE Kitchen Plans. See attached revised drawing P9.1.
15. Drawing E3.7, PARTIAL FIRST FLOOR POWER PLAN – AREA “B”
- a. REVISE note in Media Center, B121. See attached revised drawing E3.7.
 - b. ADD circuit and devices for display case in Lobby B128. See attached revised drawing E3.7.
 - c. ADD copier circuit and devices in Room B101. See attached revised drawing E3.7.
16. Drawing E3.8, PARTIAL FIRST FLOOR POWER PLAN – AREA “C”
- a. ADD circuit and devices for kiln in Room C110. See attached revised drawing E3.8.
 - b. ADD circuit and connection in Room C136. See attached revised drawing E3.8.
 - c. REVISE wiring in Rooms C116 and C119. See attached revised drawing E3.8.
 - d. REVISE note numbers in Rooms C119 and C120. See attached revised drawing E3.8.
 - e. ADD location of T-2 and Panel “CDP”. See attached revised drawing E3.8.
17. Drawing E5.2, DETAILS – ELECTRICAL
- a. REVISE Single-Line Diagram for “MDP”. Refer the attached Sketch SK-E-33.
 - b. REVISE Single-Line Diagram for “DP-1”. Refer the attached Sketch SK-E-34.
18. Drawing E6.1, SCHEDULES – ELECTRICAL
- a. REVISED LEGEND and FIXTURE SCHEDULE. Refer the attached Sketch SK-E-35.
19. Drawing E6.2, SCHEDULES – ELECTRICAL
- a. REVISE circuit for sweeper pump. Refer the attached Sketch SK-E-36.
20. Drawing E6.3, SCHEDULES – ELECTRICAL
- a. REVISE Panel Schedule for “LP-5”. Refer the attached Sketch SK-E-37.
21. Drawing E6.4, PANEL SCHEDULES – ELECTRICAL
- a. REVISE Panel Schedule for RP-3. Refer the attached Sketch SK-E-38.
22. Drawing E6.6, PANEL SCHEDULES – ELECTRICAL
- a. REVISE Panel Schedule for KP-1 and KP-2. Refer the attached Sketch SK-E-39.
 - b. REVISE Panel Schedule for CT-1 and PP-1. Refer the attached Sketch SK-E-40.
 - c. ADD Section 2 to Panel RP-4. Refer the attached Sketch SK-E-39.

End of Addendum No. 1



Contract: A-01: Sitework

BID FORM

For Bids Due: _____ To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Name of Bidder: _____

Bidder Address: _____

Contact Name: _____ E-Mail Address: _____

Delaware Business License No.: _____ Taxpayer ID No.: _____

(Other License Nos.): _____

(A copy of Bidder's Delaware Business License must be attached to this form.)

Phone No.: () _____ - _____ Fax No.: () _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

\$ _____ (\$ _____)

ALTERNATES

Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

Alternate No. 1: Landscape Irrigation at Building

Add/Deduct _____ (\$ _____)

Alternate No. 2: Multi-Purpose Field Irrigation

Add/Deduct _____ (\$ _____)

Alternate No. 3a: Swing Assembly Items

Add/Deduct _____ (\$ _____)

Alternate No. 3b: Play Assembly Items

Add/Deduct _____ (\$ _____)

Alternate No. 3c: Play Items

Add/Deduct _____ (\$ _____)

Alternate No. 9: Trees Along Mapleton & Raleigh Areas

Add/Deduct _____ (\$ _____)

Alternate No. 11: Additional Construction Entrance Access Road

Add/Deduct _____ (\$ _____)

UNIT PRICES

Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

	<u>BULK</u>		<u>TRENCH</u>	
	<u>Add</u>	<u>Deduct</u>	<u>Add</u>	<u>Deduct</u>
1. Price per Cubic Yard for earth excavation	_____ c/y	_____ c/y	_____ c/y	_____ c/y
2. Additional mass concrete in footings	_____ c/y	_____ c/y	_____ c/y	_____ c/y
3. Price per cubic yard for concrete in foundation walls (including forms and reinforcement)	_____ c/y	_____ c/y	_____ c/y	_____ c/y
4. Price per cubic yard for reinforced concrete on grade.	_____ c/y	_____ c/y	_____ c/y	_____ c/y
5. Price per cubic yard for reinforced concrete. Including forms) for structural slabs above grade	_____ c/y	_____ c/y	_____ c/y	_____ c/y
6. Price per cubic yard for excavation and backfill With select material	_____ c/y	_____ c/y	_____ c/y	_____ c/y

NOTE: The difference in price between Add and Deduct in the above Unit Prices should not exceed fifteen percent (15%).

I/We acknowledge Addendums numbered _____ and the price(s) submitted include any cost/schedule impact they may have.

This bid shall remain valid and cannot be withdrawn for sixty (90) days from the date of opening of bids, and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid (if required).

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

(State of Corporation)

Business Address: _____

Witness: _____ By: _____
(SEAL) (Authorized Signature)

(Title)
Date: _____

ATTACHMENTS

Sub-Contractor List
Non-Collusion Statement

Bid Bond
Consent of Surety
Affidavit of Employee Drug Testing Program (1 per contractor/subcontractor)
Delaware Business License
New Castle County Business License
(Others as Required by Project Manuals)

SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b Delaware Code, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, **it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.**

<u>Subcontractor</u> <u>Category</u>	<u>Subcontractor</u>	<u>Address (City & State)</u>	<u>Subcontractors tax payer ID # or Delaware Business license #</u>
1. Sitework	_____	_____	_____
2. Paving	_____	_____	_____
3. Landscaping	_____	_____	_____
4. Irrigation	_____	_____	_____

NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date

All the terms and conditions of *Contract A-01 Sitework* have been thoroughly examined and are understood.

NAME OF BIDDER: _____

AUTHORIZED REPRESENTATIVE
(TYPED): _____

AUTHORIZED REPRESENTATIVE
(SIGNATURE): _____

TITLE: _____

ADDRESS OF BIDDER: _____

PHONE NUMBER: _____

Sworn to and Subscribed before me this _____ day of _____ 20____.

My Commission expires _____. NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

BID BOND

TO ACCOMPANY PROPOSAL
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That: _____ of
_____ in the County of _____ and State of _____ as
Principal, and _____ of _____ in the County of _____
_____ and State of _____ as Surety, legally authorized to do business in the State of Delaware
("State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____
Dollars (S _____), or percent not to exceed _____
_____ Dollars (S _____) of amount of bid on Contract No. _____ to be paid to the
Appoquinimink School District for the use and benefit of the **Appoquinimink School District** for which payment well
and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly
and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the
Appoquinimink School District a certain proposal to enter into this contract for the furnishing of certain material and/or
services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute
this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this
Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the
terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____ seal and dated this ____ day of _____ in the year of our Lord two thousand
and _____ (20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

Name of Bidder (Organization)

Corporate
Seal
Attest _____

By: _____
Authorized Signature

Title

Name of Surety

Witness _____

Title

CONSENT OF SURETY

DATE _____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

(Surety Company's Address)

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

(Contractor)

(Address)

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

(Surety Company)

By _____
(Attorney-in-Fact)

AFFIDAVIT
OF
EMPLOYEE DRUG TESTING PROGRAM

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite that complies with this regulation:

Contractor/Subcontractor Name: _____

Contractor/Subcontractor Address: _____

Authorized Representative (typed or printed): _____

Authorized Representative (signature): _____

Title: _____

Sworn to and Subscribed before me this _____ day of _____ 20____.

My Commission expires _____. NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

Contract: A-07 : Metal Studs & Drywall

BID FORM

For Bids Due: _____ To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Name of Bidder: _____

Bidder Address: _____

Contact Name: _____ E-Mail Address: _____

Delaware Business License No.: _____ Taxpayer ID No.: _____

(Other License Nos.): _____

(A copy of Bidder's Delaware Business License must be attached to this form.)

Phone No.: () _____ - _____ Fax No.: () _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

\$ _____ (\$ _____)

ALTERNATES

Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

Alternate No. 6: **Acoustical Clouds in Library**

Add/Deduct _____ (\$ _____)

Alternate No. 7: **GWB and Acoustical Clouds in Lobby**

Add/Deduct _____ (\$ _____)

Alternate No. 8: GWB and Acoustical Clouds at Commons Areas

Add/Deduct _____ (\$ _____)

UNIT PRICES

Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

NOTE: The difference in price between Add and Deduct in the above Unit Prices should not exceed fifteen percent (15%).

I/We acknowledge Addendums numbered _____ and the price(s) submitted include any cost/schedule impact they may have.

This bid shall remain valid and cannot be withdrawn for sixty (90) days from the date of opening of bids, and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid (if required).

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

(State of Corporation)

Business Address: _____

Witness: _____ By: _____
(SEAL) (Authorized Signature)

(Title)
Date: _____

ATTACHMENTS

Sub-Contractor List
Non-Collusion Statement
Bid Bond
Consent of Surety
Affidavit of Employee Drug Testing Program (1 per contractor/subcontractor)
Delaware Business License
New Castle County Business License
(Others as Required by Project Manuals)

SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b Delaware Code, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, **it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.**

<u>Subcontractor</u> <u>Category</u>	<u>Subcontractor</u>	<u>Address (City & State)</u>	<u>Subcontractors tax payer ID # or Delaware Business license #</u>
1. Metal Stud Framing	_____	_____	_____
2. Fireproofing	_____	_____	_____
3. EIFS	_____	_____	_____
4. Install Drywall	_____	_____	_____
5. Finishing Drywall	_____	_____	_____

NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date

All the terms and conditions of *Contract A-07 Metal Studs & Drywall* have been thoroughly examined and are understood.

NAME OF BIDDER: _____

AUTHORIZED REPRESENTATIVE
(TYPED): _____

AUTHORIZED REPRESENTATIVE
(SIGNATURE): _____

TITLE: _____

ADDRESS OF BIDDER: _____

PHONE NUMBER: _____

Sworn to and Subscribed before me this _____ day of _____ 20____.

My Commission expires _____. NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

BID BOND

TO ACCOMPANY PROPOSAL
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That: _____ of
_____ in the County of _____ and State of _____ as
Principal, and _____ of _____ in the County of _____
_____ and State of _____ as Surety, legally authorized to do business in the State of Delaware
("State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____
Dollars (S _____), or percent not to exceed _____
_____ Dollars (S _____) of amount of bid on Contract No. _____ to be paid to the
Appoquinimink School District for the use and benefit of the **Appoquinimink School District** for which payment well
and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly
and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the
Appoquinimink School District a certain proposal to enter into this contract for the furnishing of certain material and/or
services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute
this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this
Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the
terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____ seal and dated this ____ day of _____ in the year of our Lord two thousand
and _____ (20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

Name of Bidder (Organization)

Corporate
Seal
Attest _____

By: _____
Authorized Signature

Title

Name of Surety

Witness _____

Title

CONSENT OF SURETY

DATE _____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

(Surety Company's Address)

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

(Contractor)

(Address)

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

(Surety Company)

By _____
(Attorney-in-Fact)

AFFIDAVIT
OF
EMPLOYEE DRUG TESTING PROGRAM

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite that complies with this regulation:

Contractor/Subcontractor Name: _____

Contractor/Subcontractor Address: _____

Authorized Representative (typed or printed): _____

Authorized Representative (signature): _____

Title: _____

Sworn to and Subscribed before me this _____ day of _____ 20_____.

My Commission expires _____. NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

Contract: A-08 : Glass & Glazing

BID FORM

For Bids Due: _____ To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Name of Bidder: _____

Bidder Address: _____

Contact Name: _____ E-Mail Address: _____

Delaware Business License No.: _____ Taxpayer ID No.: _____

(Other License Nos.): _____

(A copy of Bidder's Delaware Business License must be attached to this form.)

Phone No.: () _____ - _____ Fax No.: () _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

\$ _____ (\$ _____)

ALTERNATES

Not Applicable

UNIT PRICES

Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

NOTE: The difference in price between Add and Deduct in the above Unit Prices should not exceed fifteen percent (15%).

I/We acknowledge Addendums numbered _____ and the price(s) submitted include any cost/schedule impact they may have.

This bid shall remain valid and cannot be withdrawn for sixty (90) days from the date of opening of bids, and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid (if required).

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

(State of Corporation)

Business Address: _____

Witness: _____ By: _____
(SEAL) (Authorized Signature)

(Title)
Date: _____

ATTACHMENTS

Sub-Contractor List
Non-Collusion Statement
Bid Bond
Consent of Surety
Affidavit of Employee Drug Testing Program (1 per contractor/subcontractor)
Delaware Business License
New Castle County Business License
(Others as Required by Project Manuals)

SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b Delaware Code, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, **it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.**

<u>Subcontractor</u> <u>Category</u>	<u>Subcontractor</u>	<u>Address (City & State)</u>	<u>Subcontractors tax payer ID # or Delaware Business license #</u>
1. Exterior Glass	_____	_____	_____
2. Interior Glass	_____	_____	_____
3. Caulker	_____	_____	_____

NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date

All the terms and conditions of *Contract A-08 Glass & Glazing* have been thoroughly examined and are understood.

NAME OF BIDDER: _____

AUTHORIZED REPRESENTATIVE
(TYPED): _____

AUTHORIZED REPRESENTATIVE
(SIGNATURE): _____

TITLE: _____

ADDRESS OF BIDDER: _____

PHONE NUMBER: _____

Sworn to and Subscribed before me this _____ day of _____ 20____.

My Commission expires _____. NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

BID BOND

TO ACCOMPANY PROPOSAL
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That: _____ of
_____ in the County of _____ and State of _____ as
Principal, and _____ of _____ in the County of _____
_____ and State of _____ as Surety, legally authorized to do business in the State of Delaware
("State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____
Dollars (S _____), or percent not to exceed _____
_____ Dollars (S _____) of amount of bid on Contract No. _____ to be paid to the
Appoquinimink School District for the use and benefit of the **Appoquinimink School District** for which payment well
and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly
and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the
Appoquinimink School District a certain proposal to enter into this contract for the furnishing of certain material and/or
services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute
this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this
Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the
terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____ seal and dated this ____ day of _____ in the year of our Lord two thousand
and _____ (20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

Name of Bidder (Organization)

Corporate
Seal
Attest _____

By: _____
Authorized Signature

Title

Name of Surety

Witness _____

Title

CONSENT OF SURETY

DATE _____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

(Surety Company's Address)

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

(Contractor)

(Address)

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

(Surety Company)

By _____
(Attorney-in-Fact)

AFFIDAVIT
OF
EMPLOYEE DRUG TESTING PROGRAM

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite that complies with this regulation:

Contractor/Subcontractor Name: _____

Contractor/Subcontractor Address: _____

Authorized Representative (typed or printed): _____

Authorized Representative (signature): _____

Title: _____

Sworn to and Subscribed before me this _____ day of _____ 20_____.

My Commission expires _____. NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

excavation or concrete.

20. This Contractor to excavate down to the bottom of all wall and column footings as shown on drawings. This Contractor is responsible for excavating all elevator pits, stairs and ramps as shown on drawings. This Contractor is also responsible for the backfill of these areas.
21. The Sitework Subcontractor will bring the area beneath the building to an elevation 99.33 +/- 1/2". (This accounts for Elevation 100'-00" FF minus (4"SOG & 4" of drainage fill and vapor barrier) The area will then be turned over to the Concrete Contractor who will be excavating and installing the foundations. Backfilling around the foundation walls, inside and outside, will be the responsibility of the Concrete Contractor. The Concrete Contractor will also be responsible for additional excavation and backfilling within the building as may be required to accommodate the sloped floors in the auditorium, varying slab thicknesses, depressed slabs and grade changes. Close coordination with the Sitework, Masonry, Mechanical and Electrical Contractors is required.
22. Provide and maintain perimeter fall protection at excavated areas per OSHA standards.
23. Provide pipe, and associated materials & backfill for foundation drainage.
24. Provide dewatering for perimeter waterproofer.
25. Provide certified anchor bolt verification drawings to the Construction Manager for review prior to steel erection.
26. Equipment bases and foundations shall be the responsibility of the Contractor providing the equipment.
27. Asphalt concrete paving and portland cement concrete paving, sidewalks and curbs shall be provided by others.
28. All concrete testing will be completed by the Construction Manager, however, it will be the responsibility of this Contractor to furnish all samples.
29. Provide offsite disposal of all unsuitable excavated materials.
30. The Construction Manager will verify that FF/FL compliance is verified by an independent testing agency within 48 hours of completion of pours, per ACI (Section 8.15.4). ~~This contractor must maintain the specified tolerances as indicated in Section 033000.~~ All costs associated with any grinding or patching required to meet minimal tolerances of flooring finishes will be completed by this contractor at no additional cost to the project.
31. Provide specified sloping for floor drains/trenches as needed. (Drains to be furnished by Mechanical Contractor.)

CONTRACT NO. A-04 - STRUCTURAL STEEL & MISCELLANEOUS METALS

A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:

- Technical Specification Sections:

Division 0	Bidding and Contract Requirements
Division 1	General Requirements
Section 051200	Structural Steel Framing
Section 052100	Steel Joists Framing
Section 053100	Steel Decking
Section 055000	Metal Fabrications
Section 055113	Metal Pan Stairs
Section 055213	Pipe & Tube Railings
Section 107316	Metal Canopies

This contract also includes, but is not necessarily limited to, all labor, materials and equipment for the following:

1. Provide structural steel, prefabricated building columns, field-installed shear connections, embeds, joists, shelf angles, loose lintels, steel weld plates, stairs & railings.
2. Provide all metal floor and roof decking with the exception of the perimeter roof dormers. At the perimeter roof dormers, the steel contractor shall furnish only metal decking to the Metal Stud & Drywall Contractor to install where deck bears on metal studs framing. Add to MS&D
3. Continuous bent plate as per typical conditions identified on details 1-2 & 4/A4.2 are to be provided by Metal Stud Contractor. Do not include costs for this work.
4. Furnish anchor bolts and leveling plates to the Concrete Contractor for placement in concrete piers.
5. Provide as-built verification of all anchor bolts will be required PRIOR to commencing with steel erection.
6. Provide roof sump pans and related work.
7. Provide framing out for openings (roof drains, mechanical openings, access hatches, stairs, etc.). Assume opening frames will be field installed.
8. Prime paint systems, galvanizing, and related finishing of steel items, including touch up. This contractor shall provide primer that is compatible with specified fireproofing materials and finish painting where required.

for ceramic tile installations. Any additional reworking required to meet these tolerances will be this contractor's responsibility in cost and schedule.

8. Provide all metal stud framing required to back up ~~EFS~~ **Manufactured Molding and Trim**, cementitious siding, brick, etc.
9. Provide metal furring.
10. Provide all glass fiber reinforced gypsum work including materials, taping.
11. Provide batt insulation, both thermal and acoustical and related work.
12. Include molded shapes.
13. Provide acoustical sealant of penetrations in insulated drywall partitions.
14. Provide access doors & frames installations in both masonry & drywall walls (assume 30 total).
15. Include fire taping and sealing at perimeter edge and as shown on the Drawings.
16. Provide all cranes, scaffolding and lifts for this work.
17. Comebacks and out-of-sequence work may be required and as such should be included.
18. Include all necessary field measurements.
19. Engineered shop and installation drawings as required.
20. Install metal decking at mansard trusses. Metal decking and trusses are to be supplied by steel contractor.
21. Provide all exterior wall sheathing (DensGlass, flashings, etc.), asphalt felts and Tyvek on structural steel studs.
22. Provide cementitious siding, fascia's, trim pieces, etc. Confirm nothing else is required here
23. Installation of masonry veneer anchors are not to be included in this work. They will be provided by the Masonry Contractor.
24. No power for welding equipment will be provided.
25. Provide fire resistant joint systems at floors and walls.
26. Include two (2) passes per floor to "touch-up" mechanical penetrations to ensure ratings

- required. The first pass will be required prior to ceiling grid installation and the second pass will be required prior to final inspection for Certificate of Occupancy.
27. Bidders are advised to pay particular attention to top of wall conditions, fire and smoke safing of slabs and acoustical sealants.
 28. Provide pricing for all alternates as described in Section 012300-Alternates.
 29. This contractor shall provide all structure shop drawings within 2 weeks of award so that the fully coordinated shop drawings with MEP Trades and BIM Coordinator are submitted within 8 weeks from award of project.
 30. All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.
 31. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
 32. Provide GFRC decorative columns and balusters.
 33. Provide ~~Exterior Insulated Finish System (EIFS)~~ **Manufactured Molding and Trim**. Exterior metal studding, insulation, gypsum board and Tyvek will be provided by Contract A-07.
 - a. Provide ~~EIFS~~ **Manufactured Molding and Trim** as field applied or panelized.
 - i. Provide caulking of the following:
 1. ~~EIFS Manufactured Molding and Trim~~ to ~~EIFS Manufactured Molding and Trim~~
 2. ~~EIFS Manufactured Molding and Trim~~ to Masonry
 3. ~~EIFS Manufactured Molding and Trim~~ to Aluminum
 - b. Provide flashing required at ~~EIFS system~~ **Manufactured Molding and Trim**.
 - c. Provide any rough blocking built into ~~panelized-EIFS~~ **Manufactured Molding and Trim** is the responsibility of this Contractor.
 - d. Provide hoisting and scaffolding as required.
 - e. Provide anchors for supporting ~~EIFS panels~~ **Manufactured Molding and Trim**.
 - f. Provide scoring, beads and joints as required and as detailed on the contract documents.
 34. Provide fireproofing, both exposed and concealed.
 - a. Provide clean up on a daily basis, all over spray materials. Provide perimeter protection around areas of fireproofing installation to protect surrounding materials

CONTRACT NO. A-09 - CASEWORK AND MILLWORK

A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:

- Technical Specification sections:

Division 0	Bidding and Contract Requirements
Division 1	General Requirements
Section 062023	Interior Finish Carpentry
Section 064023	Interior Architectural Woodwork
Section 079200	Joint Sealants
Section 120600	Plastic Laminate Casework Schedule
Section 123216	Manufactured Plastic-Laminate-Faced Casework
Section 123623	Plastic-Laminate-Clad Countertops
Section 123661.16	Solid Surface Countertops

This contract also includes, but is not necessarily limited to, all labor, materials and equipment for the following:

1. Provide labor and materials to perform the work related to all casework and millwork.
2. Provide all field trimming required to adjust to existing conditions.
3. Provide all millwork, casework, trim and hardware and including all toe kicks, student cubbies, shelves, enclosures at lockers, filler strips and window stools were indicated in the project document.
4. Provide all wardrobe and closet specialties such as hardware, hooks, shelves, etc.
5. Coordinate power and data requirements and locations with the electrical contractor for locations and sizes of holes needed.
6. Comply with AWI quality certifications.
- ~~7. Provide solid surface column wraps, countertops, filler strips and backsplashes were indicated in the project documents. Provide slotted aluminum picture rail where integral with solid surface wall coverings.~~
8. ~~Provide solid surface base.~~ **Solid surface base was eliminated. Any rubber base will be completed by the flooring contractor.**
9. Coordinate cutting holes in casework with other trades.
10. Coordinate blocking requirements with Contract A-05: Carpentry & General Works.



November 14, 2017

Gilbert Architects, Inc.
Lancaster, PA. 17603

Attn: Project Architect

RE: New Whitehall Elementary School – Appoquinimink School District

Dear Project Architect,

Thank you for the opportunity to introduce Draper, Inc. and EZ Fold backstops to another owner in your area. We are forwarding this information and request for prior approval for the above referenced project on behalf of our local dealer, Centre Stage Manufacturing.

Since 1902, Draper has been a recognized worldwide leader in our industry. A traditional leader in educational window shades and audiovisual projection screens, Draper entered the gymnasium equipment market in 1994 when we acquired the Steelco line of divider curtains, wall padding and practice cages. Steelco divider curtains have been on the market since the mid-1970's and are in use in thousands of facilities throughout the world. Draper has a volume in excess of 500 divider curtains produced each year. Draper offers five styles of divider curtains, most of which feature a one horsepower UL approved winch assembly and many of which feature a five-year warranty.

In 1998 Draper was pleased to add EZ Fold backstops to our family of quality products via acquisition of certain assets of Progressive Athletics, Inc. EZ Fold is the finest basketball backstop system on the market today. EZ Fold has been the first and finest backstop since 1955. EZ Fold was the first to design the single stem all-welded main frame (now the industry standard); first to use high-strength mechanical tubing instead of heavy pipes; first to install a 71' high folding backstop; and the only one to offer a 25-year warranty. The EZ Fold basketball backstop is truly your first and wisest choice.

We request that you approve Draper as an acceptable manufacturer for the athletic equipment for the above referenced project. We have carefully reviewed the requirements for this project and are certain that our products meet or exceed requirements for this project. We are including a cross-reference chart, which matches our models with those of the specified manufacturer. We are also including detailed specifications and comparisons for your review.

If you have any questions, or need additional information, please feel free to call.

Sincerely,
DRAPER, INC.

Neal A. Turner, CSI, CCPR, LEED® AP
Manager-Gym Equipment

DRAPER, INC.
Established 1902

411 S. Pearl St., P.O. Box 425
Spiceland, IN 47385 USA

Tel. 800/989-0131
Fax 866/637-5611

www.draperinc.com



<u>PRODUCT DESCRIPTION</u>	<u>Performance</u>	<u>DRAPER</u>
Adjustable Chinning Bar	109	502015

<u>PRODUCT DESCRIPTION</u>	<u>Performance</u>	<u>DRAPER</u>
Class A Wall Pads	575	5046XX
Cut-Out Trim	n/a	504700

CSI Form 1.5C

**SUBSTITUTION
REQUEST**
(During the Bid Period)

Project: The New Whitehall Elementary School Substitution Request Number: _____
Project #1612 From: _____
To: Gilbert Architects, Inc. Date: _____
Lancaster, PA A/E Project Number: _____
Re: _____ Contract For: New elementary school
Specification Title: Gymnasium Equipment Description: Gymnasium Equipment
Section: 116623 Page: 2 Article/Paragraph: Paragraphs 2.1, 2.2

Proposed Substitution: CUT-OUT TRIM
Manufacturer: Draper Address: 411 S. PEARL ST Phone: 765-856-1225
Trade Name: _____ Model No.: 504709

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: SHANE MCCORKLE
Signed by: [Signature]
Firm: DRAPER INC.
Address: 411 S. PEARL ST SPICELAND, IN. 47385
Telephone: 765-856-1225

A/E's REVIEW AND ACTION

- ☐ Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: _____

Date: _____

Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

CSI Form 1.5C

**SUBSTITUTION
REQUEST**
(During the Bid Period)

Project: The New Whitehall Elementary School Substitution Request Number: _____
Project #1612 From: _____
To: Gilbert Architects, Inc. Date: _____
Lancaster, PA A/E Project Number: _____
Re: _____ Contract For: New elementary school
Specification Title: Gymnasium Equipment Description: Gymnasium Equipment
Section: 116623 Page: 2 Article/Paragraph: Paragraphs 2.1, 2.2

Proposed Substitution: CLASS A WALL PAD
Manufacturer: DRAPER Address: 411 S. PEARL ST Phone: 765-856-1225
Trade Name: _____ Model No.: 5046XX

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: SHANE McCORKLE
Signed by: [Signature]
Firm: DRAPER INC.
Address: 411 S. PEARL ST SPICELAND, IN 47385
Telephone: 765-856-1225

A/E's REVIEW AND ACTION

- ☐ Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: _____

Date: _____

Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

CSI Form 1.5C

SUBSTITUTION
REQUEST

(During the Bid Period)

Project: The New Whitehall Elementary School Substitution Request Number: _____
Project #1612
To: Gilbert Architects, Inc. From: _____
Lancaster, PA Date: _____
Re: _____ A/E Project Number: _____
Contract For: New elementary school
Specification Title: Gymnasium Equipment Description: Gymnasium Equipment
Section: 116623 Page: 2 Article/Paragraph: Paragraphs 2.1, 2.2

Proposed Substitution: 502015 - DELUXE ADJUSTABLE CHINNING BAR
Manufacturer: DRAPER Address: 411 S. PEARL ST Phone: 765-856-1225
Trade Name: _____ Model No.: 502015

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: SHANE MCCORKLE
Signed by: [Signature]
Firm: DRAPER INC.
Address: 411 S. PEARL ST SPICELAND, IN 47385
Telephone: 1-765-856-1225

A/E's REVIEW AND ACTION

- ☐ Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: _____

Date: _____

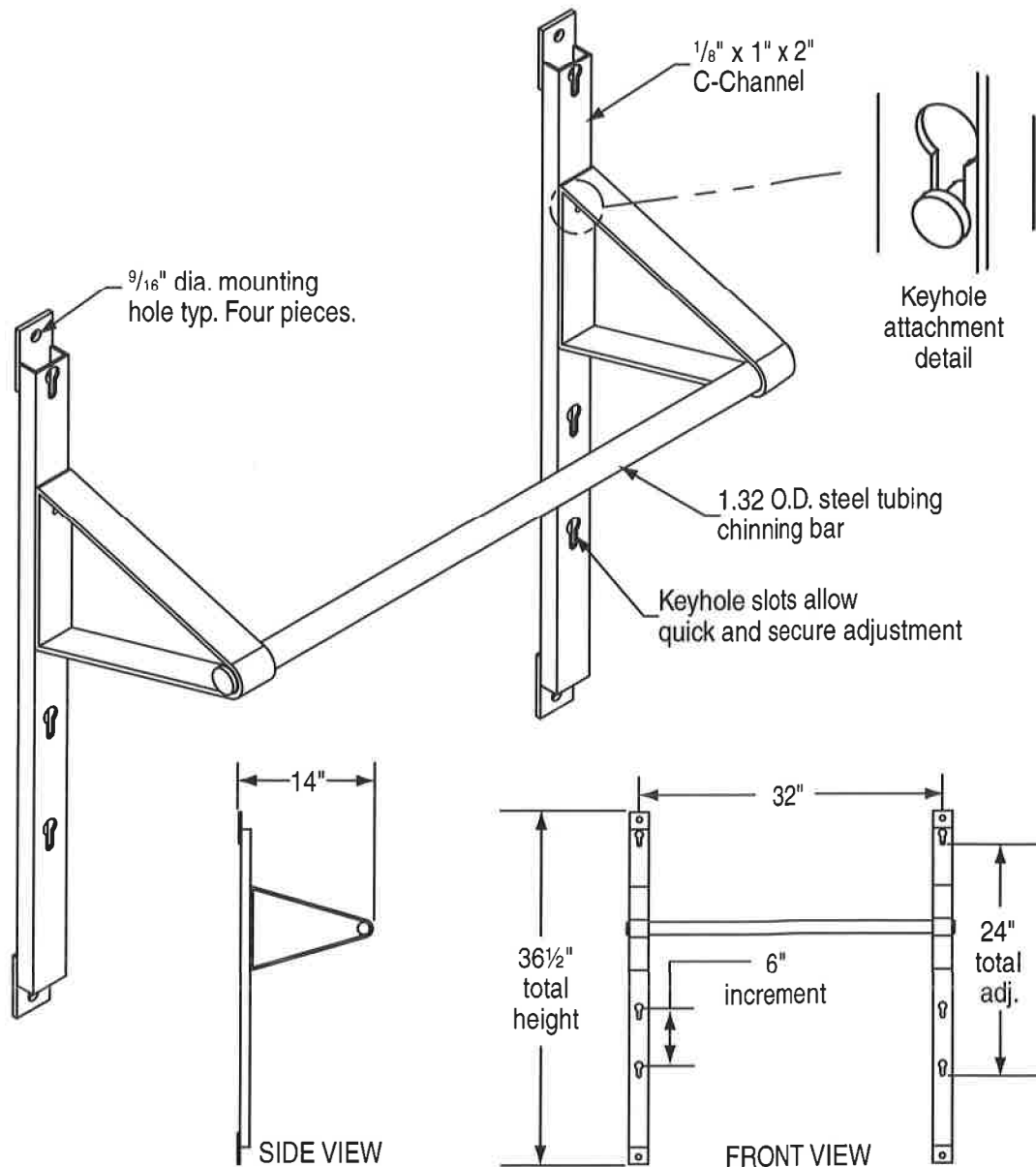
Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

502015

Deluxe Adjustable Chinning Bar

Addendum No. 2
4 December 2017

by **DRAPER**



Specifications—Deluxe Adjustable Chinning Bar

Deluxe Adjustable Chinning Bars, #502015 by Draper, Inc., of Spiceland, IN.

Bar assembly shall be 1 5/16" O.D. diameter RS-20 Steel Tubing that is 32" long and securely welded to two extension frames constructed with 1/4" x 2" steel, creating a chinning bar assembly that is designed for maximum strength and durability. Bar assembly extends 14" from attachment point and includes welded steel 1/4" tall 5/16" dia. studs with 5/8" dia. heads that allow for use with adjustable wall brackets. Chinning bar assembly shall be finished with durable and attractive powder coat.

Adjustable wall brackets shall be constructed with 1/8" x 1" x 2" steel C-Channel welded to 2" mounting tabs. Wall brackets to include keyhole slots to accept studs on back of chinning bar assembly. Keyhole slots to be located to allow for height adjustment in 6" increments.

Adjustable Chinning Bar designed for 250 lbs. maximum load with proper installation.

DRAPER®

411 S. Pearl St., Spiceland, IN 47385 USA ■ 765-987-7999
www.draperinc.com ■ fax 765-987-7142

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PROJECT: _____

ARCHITECT: _____

CONTRACTOR: _____

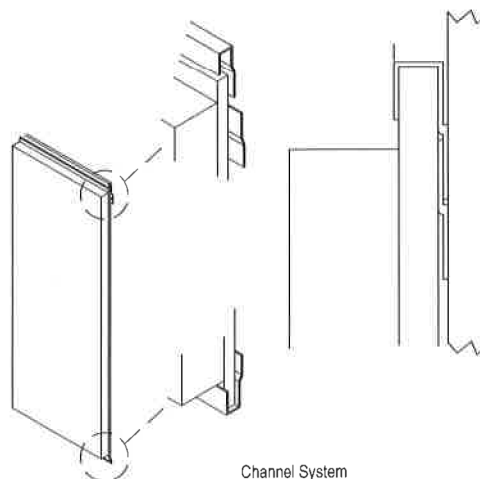
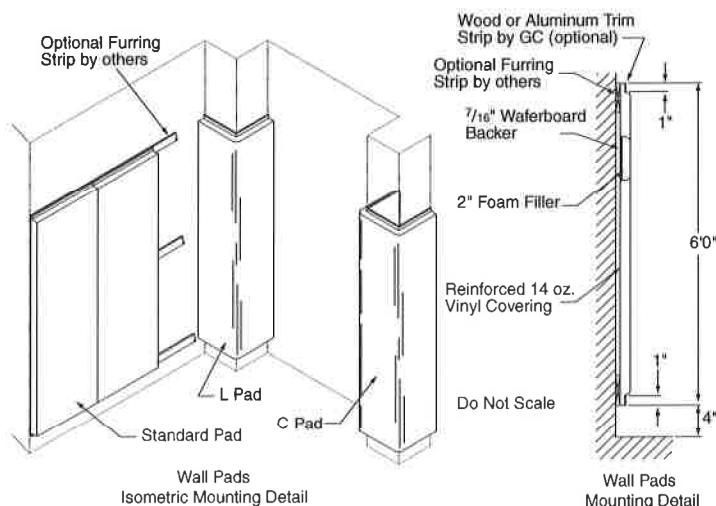
SUPPLIER: _____

DATE: _____ REVISED: _____

EcoVision™ Fire Rated Wall Pads

by

DRAPER



Channel System

Specifications—EcoVision Fire Rated Wall Pads

General: Wall Pads as shown on plans shall be EcoVision Fire Rated Wall Pads as manufactured by Draper, Inc., Spiceland, Indiana. Bidder is responsible for verification of job conditions and dimensions.

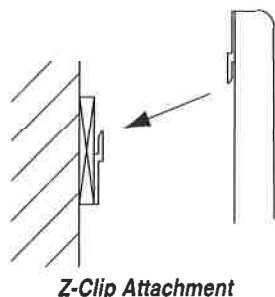
Construction: Panels shall consist of flame retardant 2" thick open cell neoprene foam, with a density of approximately 6 lbs., bonded to a 7/16" thick oriented strand board backer and covered with a 14 oz. vinyl covering. Panels shall be fully vinyl wrapped and securely stapled to the wood backer so that the backer is not exposed on front or four sides.

Vinyl cover shall be coated polyester fabric with leather grain embossed pattern. Vinyl to have average weight of 14 oz. per square yard, breaking strength of 350 PSI, tear resistance of 65 pounds and be rated as self extinguishing in accordance with California State Fire Code F-230. Vinyl to be resistant to rot, mildew, fungus and ultra-violet light and is available in Red, Dark Blue, Marine Blue, Beige, Grey, Black, Forest Green, Kelly Green, Brown, Maroon, Orange, Yellow, White, Purple and Navy Blue. Entire pad assembly has been tested and meets the requirements of NFPA 101 Life Safety Code for class A rating (flame spread 0-25 and smoke development 0-450) when tested in accordance with ASTM E-84 (also published as NFPA-255, ANSI 2.5, UBC 8-1 (42-1) and UL 723). Entire pad assembly has been tested and meets the criteria set forth in the 2003 IBC section 803.2.1 when tested in accordance with NFPA 286. NFPA 286 does not publish pass/fail criteria. Pad shall be available with standard 1" fabric-wrapped mounting flanges at panel top and bottom, Z-clip at top and 1" flange at bottom, Z-clips at top and bottom (no flanges), or Channel System.

Certifications: Entire wall pad assembly shall have been submitted to indoor air quality evaluation (IAQ) using a GREENGUARD product evaluation protocol following the requirements of The GREENGUARD Environmental Institutes (GEI) Product Certification Program, ASTM Standard D5116 and the United States Environmental Protection Agency and modeled based on GEI requirements for a standard gymnasium loading and ASHRAE 62.1 – 2004 ventilation conditions. Pad assembly shall qualify as low emitting and found to meet all of the requirements of the GREENGUARD for Children and Schools and GREENGUARD certification program which are emissions of total volatile organic compounds ≤ 0.22 mg/m³, formaldehyde ≤ 0.0135 ppm, total aldehydes ≤ 0.043 ppm, individual volatile organic compounds $\leq 1/1000$ TLV and $\leq 1/2$ chronic REL and total phthalates ≤ 0.01 mg/m³.

Entire pad assembly has been tested and meets the requirements of NFPA 101 Life Safety Code for class A rating (flame spread 0-25 and smoke development 0-450) when tested in accordance with ASTM E-84 (also published as NFPA-255, ANSI 2.5, UBC 8-1 (42-1) and UL 723). Entire pad assembly has been tested and meets the criteria set forth in the 2003 IBC section 803.2.1 when tested in accordance with NFPA 286. NFPA 286 does not publish pass/fail criteria. Pads shall meet all requirements of ASTM 2440-04.

Manufacturer must be able to provide independent lab and test reports to verify compliance with above standards and certifications.



Z-Clip Attachment



EcoVision™
Part of the Draper
EcoVision™ range
of products

Please Mark Appropriate Selections Size/Quantity

- ___ Standard size: 2' x 6' (610 x 1828 mm)
___ L shape: ___ x ___ x ___ (high)
___ C shape: ___ x ___ x ___ x ___ (high)

Pads can be custom fabricated to sizes and shapes required to accommodate structural elements, wall openings, and other project conditions. Maximum size is 4' x 8' (1.2 x 2.4 m). Supply drawing for non-rectangular pads.

Select Color:

- | | | | |
|---------------------------------------|--------------------------------------|---------------------------------|------------------------------------|
| <input type="checkbox"/> Red | <input type="checkbox"/> Maroon | <input type="checkbox"/> White | <input type="checkbox"/> Grey |
| <input type="checkbox"/> Dark Blue | <input type="checkbox"/> Marine Blue | <input type="checkbox"/> Purple | <input type="checkbox"/> Navy Blue |
| <input type="checkbox"/> Forest Green | <input type="checkbox"/> Kelly Green | <input type="checkbox"/> Orange | <input type="checkbox"/> Black |
| <input type="checkbox"/> Beige | <input type="checkbox"/> Brown | <input type="checkbox"/> Yellow | |

Select Mounting Option:

- ☐ 1" Fabric-wrapped mounting flanges at panel top and bottom
☐ Z-clip at top and 1" flange at bottom
☐ Z-clips at top and bottom (no flanges)
☐ Channel System

LEED® Submittal Information

Credit	Measure	
MRc4 — Recycled Content	Post Consumer Average 0.3%	Post Industrial 0%
MRc5 — Regional Materials	Product Manufactured in Spiceland, IN 47385	
EQ4.4 — Composite Wood & Agrifiber Products	Urea Formaldehyde Free	

DRAPER®

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www.draperinc.com ■ fax 765-987-7142

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PROJECT: _____

ARCHITECT: _____

CONTRACTOR: _____

SUPPLIER: _____

DATE: _____ REVISED: _____

Wall Pad Cutout Trim Kit

Specifications—Wall Pad Cutout Trim Kit

Wall Pad Cut-Out Trim Kit provides for a neat and clean answer to accessing receptacles and wall switches on surfaces that are to be padded. Wall Pad Cut-Out Trim Kit is constructed of flexible a flame resistant molded urethane material. Inserts are easily installed in field cut-outs and secured with adhesive and staples.

504690/504691—3" x 5" Wall Pad Cut-Out

3" x 5" Wall Pad Cut-Out Kits fit Single Gang openings. Wall Pad Cut-Out Trim Kit available in grey (part no. 504690) or black (part no. 504691).

504700/504701—7" x 7" Wall Pad Cut-Out

7" x 7" Wall Pad Cut-Out Kits fit Dual Gang openings as well as standard fire alarm pull stations. Wall Pad Cut-Out Trim Kit available in grey (part no. 504700) or black (part no. 504701).

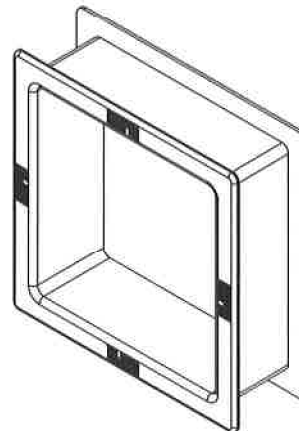
Please Mark Appropriate Selections

Select Wall Pad Cutout Trim Kit:

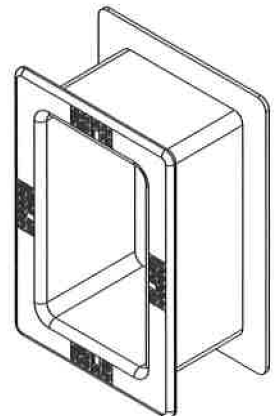
- | | | | |
|---------------------------------|---------|-------|-----------------|
| <input type="checkbox"/> 504690 | 3" X 5" | Grey | How many? _____ |
| <input type="checkbox"/> 504691 | 3" X 5" | Black | How many? _____ |
| <input type="checkbox"/> 504700 | 7" X 7" | Grey | How many? _____ |
| <input type="checkbox"/> 504701 | 7" X 7" | Black | How many? _____ |

Installation Instructions

- ① Locate cut-out on back side of pad and carefully mark the inside dimensions of cutout being used so the receptacle, switch, etc. are located at the center.
- ② Using a keyhole saw or jig-saw, cut along marked lines with saw blades and remove backer board. When cutting backer board, insure you remove marked lines with saw to allow for wall thickness of cut out kit.
- ③ Using a electric carving knife or sharp utility knife, carefully cut and remove the foam using the opening in the backer board as a guide. Use caution to not cut vinyl.
- ④ X-cut vinyl from corner and pull points to backer and staple.
- ⑤ Insert Wall Pad Cut-out Trim Kit into opening with the smaller beveled edge facing the front. Apply adhesive to the inside of the Wall Pad Cut-Out Kit Channel to adhere it to vinyl and foam and staple rear flange to backer board.



7" x 7" Wall Pad Cut-Out



3" x 5" Wall Pad Cut-Out

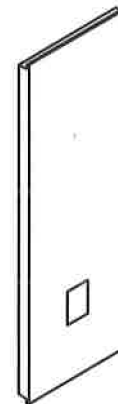


Figure 1

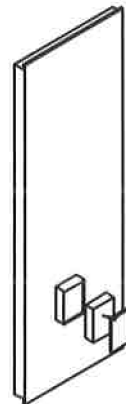


Figure 2

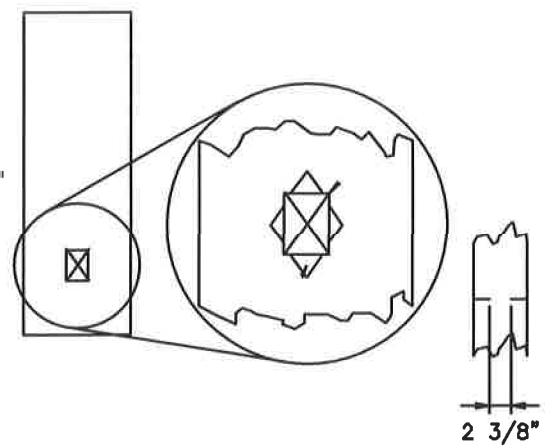
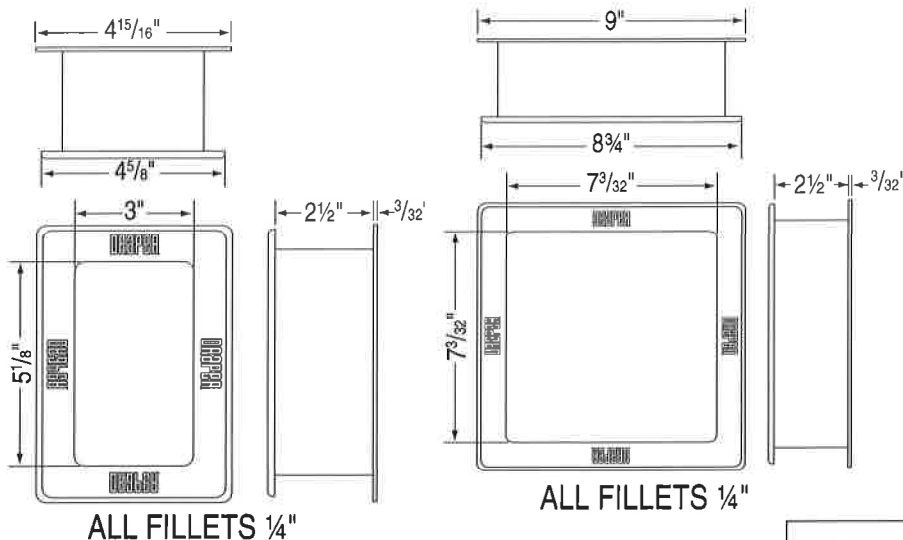


Figure 3

DRAPER®

PROJECT: _____

ARCHITECT: _____

CONTRACTOR: _____

SUPPLIER: _____

DATE: _____ REVISED: _____

THE NEW WHITEHALL ELEMENTARY SCHOOL - APPOQUINIMINK SCHOOL DISTRICT - #1621

SECTION 116623

GYMNASIUM EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Adjustable chin-up bar.
 - 2. Safety pads.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include assembly, disassembly, and storage instructions for removable equipment.
- B. Shop Drawings: For gymnasium equipment.
 - 1. Include plans, elevations, sections, and attachment details.
 - 2. Include details of field assembly for removable equipment, connections, installation, mountings, floor inserts, and operational clearances.
 - 3. Include transport and storage accessories for removable equipment.
 - 4. Include diagrams for power, signal, and control wiring.
- C. Samples for Verification: For the following products:
 - 1. Pad Fabric: Wall padding minimum 3 inches square, with specified treatments applied. Mark face of material.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Product Certificates: For each type of gymnasium equipment.
- C. Sample Warranty: For special warranty.

THE NEW WHITEHALL ELEMENTARY SCHOOL - APPOQUINIMINK SCHOOL DISTRICT - #1621

1.6 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For gymnasium equipment to include in operation and maintenance manuals.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

1.8 FIELD CONDITIONS

- A. Field Measurements: Verify position and elevation of floor inserts and layout for gymnasium equipment.

1.9 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of gymnasium equipment that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 ADJUSTABLE CHIN-UP BAR

- A. Basis-of-Design Manufacturer: Subject to compliance with requirements, provide Performance Sports Systems; #109, or comparable product by one of the following:
 - 1. AALCO Manufacturing.
 - 2. Jaypro Sports, LLC.
 - 3. Porter Athletic Equipment Company.

2.2 SAFETY PADS

- A. Basis-of-Design Manufacturer: Subject to compliance with requirements, provide Performance Sports Systems; 4100 series wall padding, or comparable product by one of the following:
 - 1. AALCO Manufacturing.
 - 2. Jaypro Sports, LLC.
 - 3. Porter Athletic Equipment Company.
- B. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Flame-Spread Index: 25 or less.
 - 2. Smoke-Developed Index: 50 or less.

THE NEW WHITEHALL ELEMENTARY SCHOOL - APPOQUINIMINK SCHOOL DISTRICT - #1621

- C. Pad Coverings: Provide safety pad fabric covering that is fabricated from puncture- and tear-resistant, PVC-coated polyester or nylon-reinforced PVC fabric, minimum 14-oz./sq. yd. and treated with fungicide for mildew resistance; with surface-burning characteristics indicated.
- D. Wall Safety Pads: Padded wall wainscot panels designed to be attached in a continuous row; each panel section consisting of fill laminated to backer board, with visible surfaces fully covered by seamless fabric covering, free of sag and wrinkles and firmly attached to back of backer board.
 - 1. Backer Board: Minimum 7/16-inch-thick OSB exterior grade wood panels with Z-clip attachment method.
 - 2. Fill: Multiple-impact-resistant foam, minimum 1-1/2-inch-thick polyurethane, 3.5-lb/cu. ft. density.
 - 3. Size: 2 ft. wide by 6 ft high.
 - 4. Installation Method: Concealed mounting Z-clips.
 - 5. Fabric Covering Color: As selected by Architect from manufacturer's full range.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for court layout, alignment of mounting substrates, installation tolerances, operational clearances, and other conditions affecting performance of the Work.
 - 1. Verify critical dimensions.
 - 2. Examine supporting structure, subfloors, and footings below finished floor.
 - 3. Examine wall assemblies, where reinforced to receive anchors and fasteners, to verify that locations of concealed reinforcements are clearly marked. Locate reinforcements and mark locations.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's written installation instructions.
- B. Install gymnasium equipment after other finishing operations, including painting, have been completed unless otherwise indicated.
- C. Permanently Placed Gymnasium Equipment and Components: Install rigid, level, plumb, square, and true; anchored securely to supporting structure; positioned at locations and elevations indicated; in proper relationship to adjacent construction; and aligned with court layout.
- D. Floor-Insert Setting: Clean oversized, recessed voids in concrete substrate of debris. Position each sleeve, and fill void around sleeve with grout, mixed and placed according to grout manufacturer's written instructions. Protect portion of sleeve above subfloor from splatter. Verify that sleeves are set plumb, aligned, and at correct height and spacing; hold in position during placement and finishing operations until grout is sufficiently cured. Set insert so top surface of completed unit is flush with finished flooring surface.

THE NEW WHITEHALL ELEMENTARY SCHOOL - APPOQUINIMINK SCHOOL DISTRICT - #1621

- E. Cutout Trim: Limit cuts in face of padding so that cuts are securely and fully concealed behind trim-kit flange.
- F. Anchoring to In-Place Construction: Use anchors and fasteners where necessary to secure built-in and permanently placed gymnasium equipment to structural support and to properly transfer load to in-place construction.
- G. Removable Gymnasium-Equipment Components: Assemble in place to verify that equipment and components are complete and in proper working order. Disassemble removable gymnasium equipment after assembled configuration is approved by Owner, and store units in location indicated on Drawings.

3.3 ADJUSTING

- A. Adjust movable components of gymnasium equipment to operate safely, smoothly, easily, and quietly; free from binding, warp, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range; and lubricate as recommended in writing by manufacturer.

3.4 DEMONSTRATION

- A. Train Owner's maintenance personnel to adjust, operate, and maintain gymnasium equipment.

END OF SECTION

CSI Form 1.5C

SUBSTITUTION
REQUEST

(During the Bid Period)

Project: The New Whitehall Elementary School Substitution Request Number: _____
Project #1612 From: _____
To: Gilbert Architects, Inc. Date: _____
Lancaster, PA A/E Project Number: _____
Re: _____ Contract For: New elementary school
Specification Title: Visual Display Units Description: Visual display units
Section: 101100 Page: 3 Article/Paragraph: Paragraph 2.3.A

Proposed Substitution: BTS Series
Manufacturer: Platinum Address: 1451 E. Sixth St Phone: 800-498-2990
Trade Name: _____ Model No.: BTS

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: Tracey Day
Signed by: Tracey G Day
Firm: Platinum Visual Systems.
Address: 1451 E. Sixth St.
Corona CA 92879
Telephone: 800-498-2990

A/E's REVIEW AND ACTION

- ☐ Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: _____

Date: _____

Supporting Data Attached: ☐ Drawings ☒ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

Boards: Box Tray Trim System [BTS]



For Markerboards, Chalkboards or Tackboards with a Box Tray

- Porcelain-on-steel writing surfaces with a lifetime warranty.
- All extrusions are manufactured with high quality aluminum alloy to exacting specifications.
- Heavy-duty aluminum extrusions come standard in clear satin anodized. Also available in optional dark bronze anodized or a variety of powder coated finishes.
- Full length extruded aluminum box tray with cast aluminum end closures.



Suggested Specifications

PART 1: *general*

1.1 SECTION INCLUDES

- A. Porcelain-on-Steel Markerboards.
- B. Porcelain-on-Steel Chalkboards.
- C. Colored Cork Tackboards.
- D. Visual Display Board Accessories.

1.2 RELATED SECTIONS

- A. Section 06100 – Wood or Steel Blocking.
- B. Section 09000 – Gypsum Wall Board.
- C. Section 09720 – Vinyl Wall Coverings.
- D. Section 09900 – Paints and Coatings.

1.3 REFERENCES

- A. ASTM B221 – Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes.
- B. ASTM E84 – Test Method for Surface Burning and Characteristics of Building Materials.
- C. ASTM C540 – Gloss Test for Porcelain Enamel Steel (Porcelain Enamel Institute PEI-501).

1.4 SUBMITTALS

- A. Submit products and samples under provisions of Section 01300.
- B. Product Data: Provide technical data for products specified. Include Material Safety Data Sheets, when applicable.
- C. Shop Drawings: Provide shop drawings for each type of visual display board specified including section details indicating trim, face, core and backing materials, dimensions, joint locations and special anchor details.
- D. Color Samples: Submit set of color chips displaying manufacturer's full range of colors and finishes.
- E. Product Samples: Submit samples not less than twelve inches square and framed on two adjacent sides, to illustrate materials, finish, color, and configuration of each type of visual display board required.
- F. Care and Maintenance Data: Provide data on cleaning requirements, stain removal, and recommended maintenance precautions.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Comply with manufacturer's instructions for handling and storage of Visual Display Boards.

1.6 PROJECT CONDITIONS

- A. Field measure prior to fabrication to ensure proper fit.
- B. General contractor to maintain proper climate before, during and after installation.

1.7 WARRANTY

- A. Submit manufacturer's "Life of Building" warranty, stating that under normal usage and maintenance, and when installed in accordance with manufacturer's instructions and recommendations, Porcelain-on-Steel Markerboards and Chalkboards are guaranteed for the life of the building.
- B. Warranty shall cover replacement of defective Porcelain-on-Steel Markerboards and Chalkboards due to discoloration, excessive fading of color, crazing, cracking or flaking. Warranty does not cover the cost of removal or reinstallation.

PART 2: *products*

2.1 MANUFACTURERS

- A. Provide visual display boards as manufactured by Platinum Visual Systems™, Corona, California. Tel.: (800)498-2990 Fax: (951)817-9900. Email: info@pvsusa.com. Website: www.pvsusa.com.
- B. Substitutions: See Section 01600 – Product Requirements.

2.2 MARKERBOARDS AND CHALKBOARD MATERIALS

- A. Steel Face Sheets: Writing surface will be Writanium® 28 gauge steel face with porcelain enamel finish fused to the steel sheet using a continuous coil process.
 - 1. Markerboard and Chalkboard surface shall be fused at a temperature of 1450° and 1200° respectively.

2. The gloss of the writing surface will not increase more than three units when subjected to wearability tests specified in testing procedures for 30 hours.
- B. Core Material: 1/2" particleboard.
- C. Backing Material: .005" aluminum backing sheet.
- D. Metal Trim and Accessories: 6063 aluminum alloy with a T5 temper.
- E. Adhesive: As recommended by manufacturer for project conditions.

2.3 PORCELAIN ON STEEL MARKERBOARDS AND CHALKBOARDS

- A. Provide Markerboards and Chalkboards for project from manufacturer's BTS Series.
 1. Metal trim and accessories: BTS Series aluminum extrusions with clear satin anodized finish.
 - a. Chalktray CR340: Standard continuous hollow box chalktray with ribbed section and molded aluminum end closures.
 - b. Map rail MR411: Standard 1" high continuous rail with colored cork insert as follows:
 - 1) Endstops: One pair per Map rail.
 - 2) Map hooks: One every 2' of Map rail.
 - 3) Roller brackets: One pair per Map rail.
 - 4) Flag holder: One per room.
 - c. Frame CH215: Standard channel frame with 3/4" face.
 2. Size: As shown on drawings.
 3. Color: As selected from manufacturer's standard colors.

2.4 COLORED CORK TACKBOARD MATERIALS

- A. Face Sheet: Colored cork surface will be 1/4" resilient homogenous tackable linoleum surface consisting of linseed oil, granulated cork, rosin binders and dry pigments calendared onto natural burlap backing. Color shall extend through thickness of material and be self-healing.
- B. Core Material: 1/4" medium density fiberboard.
- C. Metal Trim: 6063 aluminum alloy with T5 temper.
- D. Adhesive: As recommended by manufacturer for project conditions.

2.5 COLORED CORK TACKBOARDS

- A. Provide Tackboards for project from manufacturer's BTS Series.
 1. Metal trim and accessories: BTS Series aluminum extrusions with clear satin anodized finish.
 - a. Frame CH215: Standard channel frame with 3/4" face.
 2. Size: As shown on drawings.
 3. Color: As selected from manufacturer's standard colors.

2.6 FABRICATION

- A. Laminate facing sheet and backing sheet to core material under pressure, using manufacturer's recommended adhesive.
- B. Provide factory-assembled visual display boards, except where sizes demand partial field assembly.
- C. Assemble units in one piece without joints, wherever possible. Where required dimensions exceed maximum panel size available, provide two or more pieces of equal length, as indicated on approved shop drawings. Assemble to verify fit at factory, then disassemble for delivery and final assembly at project site.

PART 3: *execution*

3.1 EXAMINATION

- A. Verify that substrates are properly prepared to receive visual display boards. Do not begin installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

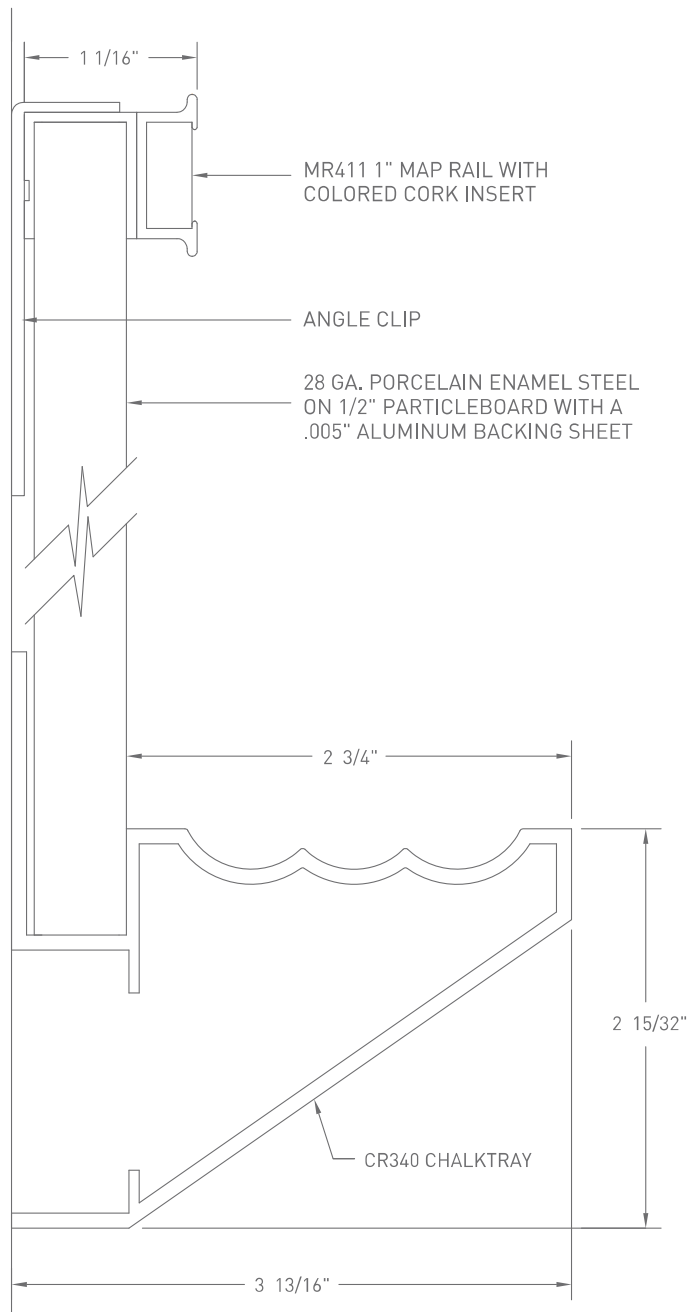
- A. Comply with manufacturer's installation instructions.
- B. Where visual display boards must be partly assembled at project site, use factory-supplied H-bar to maintain proper alignment.
- C. Install visual display boards level and plumb, keeping perimeter trim aligned in accordance with manufacturer's recommendations.

3.3 ADJUSTING AND CLEANING

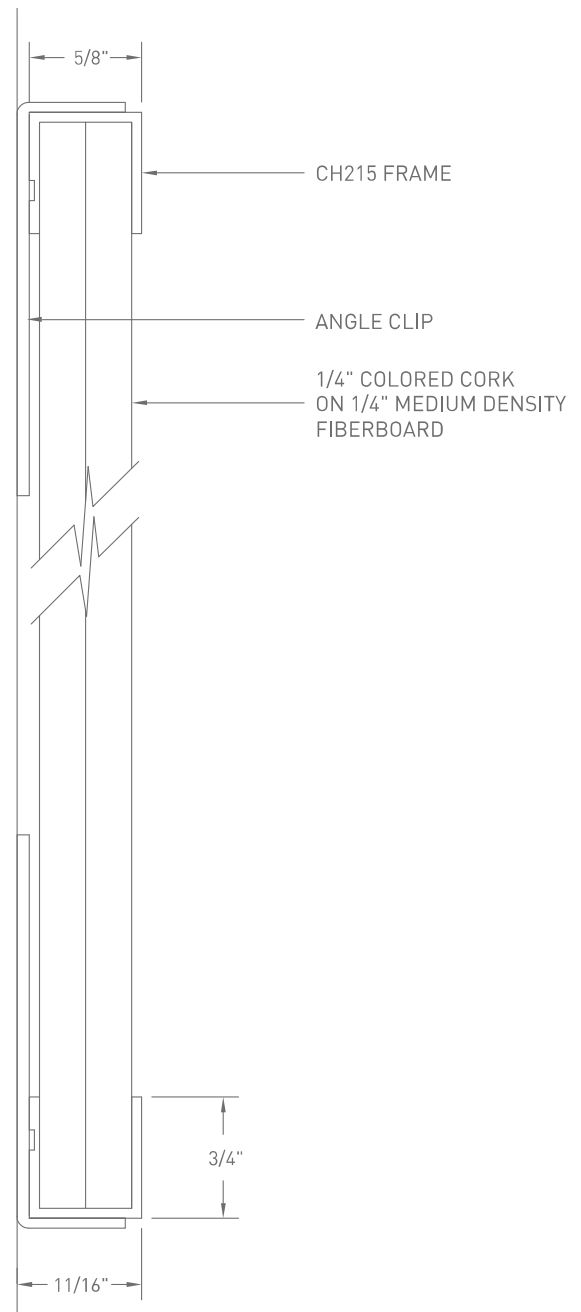
- A. Verify that all accessories are installed as required for each unit.
- B. Upon completion of installation, clean surfaces and trim in accordance with manufacturer's recommendations, leaving all materials ready for use.

BTS: Specifications

MARKERBOARD/CHALKBOARD



TACKBOARD



PLATINUM
LET'S CREATE TOGETHER.™

1451 E. Sixth Street, Corona, CA 92879
800 498 2990 | 951 817 2200 | FAX 951 817 9900
www.pvsusa.com | info@pvsusa.com

CSI Form 1.5C

SUBSTITUTION
REQUEST

(During the Bid Period)

Project: The New Whitehall Elementary School
Project #1612
To: Gilbert Architects, Inc.
Lancaster, PA
Re: _____
Specification Title: Visual Display Units
Section: 101100 Page: 3
Substitution Request Number: _____
From: _____
Date: _____
A/E Project Number: _____
Contract For: New elementary school
Description: Marker wall
Article/Paragraph: Paragraph 2.4

Proposed Substitution: FCS Series
Manufacturer: Platinum Address: 1451 E. Sixth St. Phone: 800-498-2990
Trade Name: _____ Model No.: FCS

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: Tracey Day
Signed by: Tracey & Day
Firm: Platinum Visual Systems
Address: 1451 E. Sixth St.
Corona CA 92879
Telephone: 800-498-2990

A/E's REVIEW AND ACTION

- ☐ Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: _____

Date: _____

Supporting Data Attached: _____
wings ☒ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

Boards: Floor to Ceiling Markerboard System [FCS]



For Wall to Wall Markerboard Panels Joined with a Concealed Spline

- The ideal solution for applications that require the absolute maximum amount of writing space.
- Porcelain-on-steel writing surfaces with a lifetime warranty.
- All extrusions are manufactured with high quality aluminum alloy to exacting specifications.
- Can be designed to fit any size room.



Suggested Specifications

PART 1: *general*

1.1 SECTION INCLUDES

- A. Porcelain-on-Steel Markerboards.
- B. Porcelain-on-Steel Chalkboards.

1.2 RELATED SECTIONS

- A. Section 06100 – Wood or Steel Blocking.
- B. Section 09000 – Gypsum Wall Board.
- C. Section 09720 – Vinyl Wall Coverings.
- D. Section 09900 – Paints and Coatings.

1.3 REFERENCES

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- C. ASTM C540 – GlossTest for Porcelain Enamel Steel (Porcelain Enamel Institute PEI-501).

1.4 SUBMITTALS

- A. Submit products and samples under provisions of Section 01300.
- B. Product Data: Provide technical data for products specified. Include Material Safety Data Sheets, when applicable.
- C. Shop Drawings: Provide shop drawings for each type of visual display board specified including section details indicating trim, face, core and backing materials, dimensions, joint locations and special anchor details.
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- F. Care and Maintenance Data: Provide data on cleaning requirements, stain removal, and recommended maintenance precautions.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Comply with manufacturer's instructions for handling and storage of Visual Display Boards.

1.6 PROJECT CONDITIONS

- A. Field measure prior to fabrication to ensure proper fit.
- B. General contractor to maintain proper climate before, during and after installation.

1.7 WARRANTY

- A. Submit manufacturer's "Life of Building" warranty, stating that under normal usage and maintenance, and when installed in accordance with manufacturer's instructions and recommendations, Porcelain-on-Steel Markerboards and Chalkboards are guaranteed for the life of the building.
- B. Warranty shall cover replacement of defective Porcelain-on-Steel Markerboards and Chalkboards due to discoloration, excessive fading of color, crazing, cracking or flaking. Warranty does not cover the cost of removal or reinstallation.

PART 2: *products*

2.1 MANUFACTURERS

- A. Provide visual display boards as manufactured by Platinum Visual Systems™, Corona, California. Tel.: (800)498-2990 Fax: (951)817-9900. Email: info@pvsusa.com. Website: www.pvsusa.com.
- B. Substitutions: See Section 01600 – Product Requirements.

2.2 MARKERBOARDS AND CHALKBOARD MATERIALS

- A. Steel Face Sheets: Writing surface will be Writanium® 28 gauge steel face with porcelain enamel finish fused to the steel sheet using a continuous coil process.
 - 1. Markerboard and Chalkboard surface shall be fused at a temperature of 1450° and 1200° respectively.
 - 2. The gloss of the writing surface will not increase more than three units when subjected to wearability tests specified in testing procedures for 30 hours.
- B. Core Material: 1/2" particleboard.
- C. Backing Material: .005" aluminum backing sheet.
- D. Metal Trim and Accessories: 6063 aluminum alloy with a T5 temper.
- E. Adhesive: As recommended by manufacturer for project conditions.

2.3 PORCELAIN ON STEEL MARKERBOARDS AND CHALKBOARDS

- A. Provide Markerboards and Chalkboards for project from manufacturer's FCS Series.
 - 1. Metal trim and accessories: FCS Series aluminum extrusions with clear satin anodized finish.
 - a. Frame CH358: Channel frame with 3/4" face. No exposed fasteners permitted.
 - b. Chalktray CR310: Standard continuous solid magnetic chalktray with ribbed section and smoothly curved ends. Length to be 24". One per elevation.
 - c. Spline: Continuous aluminum stabilizing spline at each joint.
 - 2. Floor to Ceiling Markerboards and Chalkboards Panels:
 - a. Panel Sizes: Width to be 4' wide with equal size panels at ends. Height to be a maximum of 12' high.
 - b. Joints: Butt joint factory fired edges vertically to form smooth transition from panel to panel.
 - c. Splines: Panels to be factory milled to accept aluminum stabilizing spline at each joint.
 - 3. Size: As shown on drawings.
 - 4. Color: As selected from manufacturer's standard colors.

2.4 FABRICATION

- A. Laminate facing sheet and backing sheet to core material under pressure, using manufacturer's recommended adhesive.
- B. Provide factory-assembled visual display boards, except where sizes demand partial field assembly.
- C. Assemble units in one piece without joints, wherever possible. Where required dimensions exceed maximum panel size available, provide two or more pieces of equal length, as indicated on approved shop drawings. Assemble to verify fit at factory, then disassemble for delivery and final assembly at project site.

PART 3: *execution*

3.1 EXAMINATION

- A. Verify that substrates are properly prepared to receive visual display boards. Do not begin installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

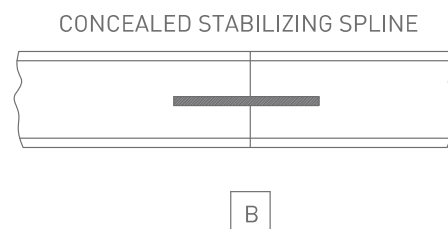
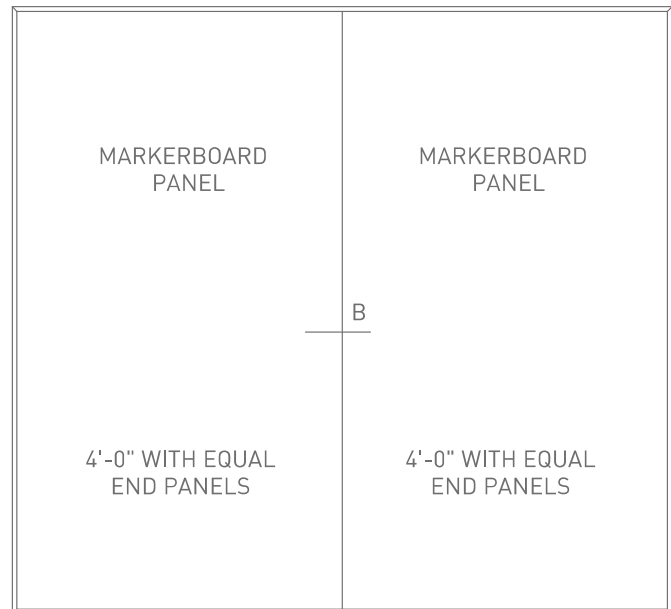
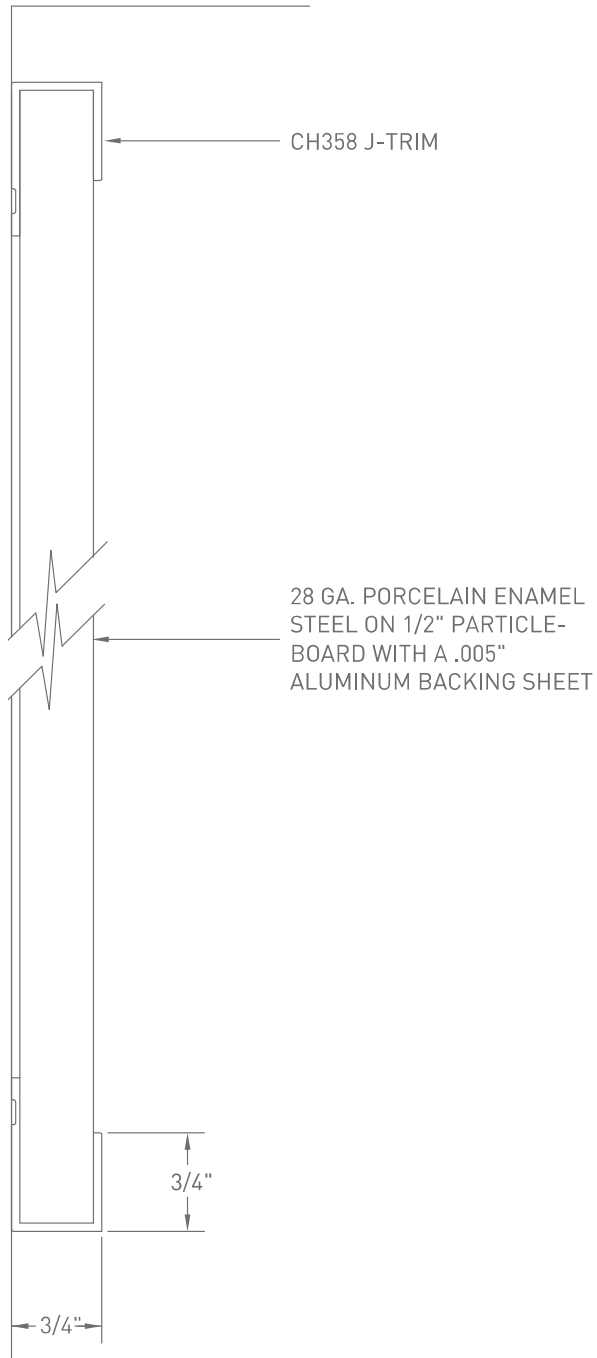
- A. Comply with manufacturer's installation instructions.
- B. Where visual display boards must be partly assembled at project site, use factory-supplied H-bar to maintain proper alignment.
- C. Install visual display boards level and plumb, keeping perimeter trim aligned in accordance with manufacturer's recommendations.

3.3 ADJUSTING AND CLEANING

- A. Verify that all accessories are installed as required for each unit.
- B. Upon completion of installation, clean surfaces and trim in accordance with manufacturer's recommendations, leaving all materials ready for use.

FCS: Specifications

FULL HEIGHT WRITING WALL



PLATINUM
LET'S CREATE TOGETHER.™

1451 E. Sixth Street, Corona, CA 92879
800 498 2990 | 951 817 2200 | FAX 951 817 9900
www.pvsusa.com | info@pvsusa.com



BIDDER'S SUBSTITUTION REQUEST FORM

Dimensional Metals, Inc. – 58 Klema Drive North – Reynoldsburg, OH 43068 – 800-828-1510

Gilbert Architects

ARCHITECT

626 N Charlotte St

STREET ADDRESS

Lancaster

CITY

(717) 291-1077

PHONE

(717) 392-3923

FAX

Appoquinimink Sch District Bid Pack A Whitehall Elem Sch

PROJECT NAME

PA

STATE

17603

ZIP

ASD1701

PROJECT NUMBER

We submit for your Consideration the following Product in addition to the specified Product for the above Project:

As per Section No. - **074293**

Paragraph No. - **2.2**

Specified Product - **Berridge L-Panel**

We submit our **FP1012**

Panel System.

(Attached you will find technical data and any laboratory tests, if applicable.)

The following changes will take place to the Drawings and Specifications for the proposed substitution's proper installation:

- A. Dimension changes in drawings -
- B. DMI will or will not pay for changes to the design, including engineering and detailing costs caused by the substituted product -
- C. Affects on other installers -
- D. Differences between our panel and panel specified -
- E. Warranty differences -

The undersigned states that the function, appearance, and quality are equivalent or superior to the specified Product.

Submitted By:

Tom Erbe

NAME

Dimensional Metals Inc. (DMI)

COMPANY NAME5

58 Klema Dr.

STREET ADDRESS

Reynoldsburg

CITY

(800) 828-1510

PHONE

(866) 853-5269

FAX

OH

STATE

43068

ZIP

FOR ARCHITECT'S USE ONLY

☐ - ACCEPTED

☐ - ACCEPTED AS NOTED

☐ - NOT ACCEPTED

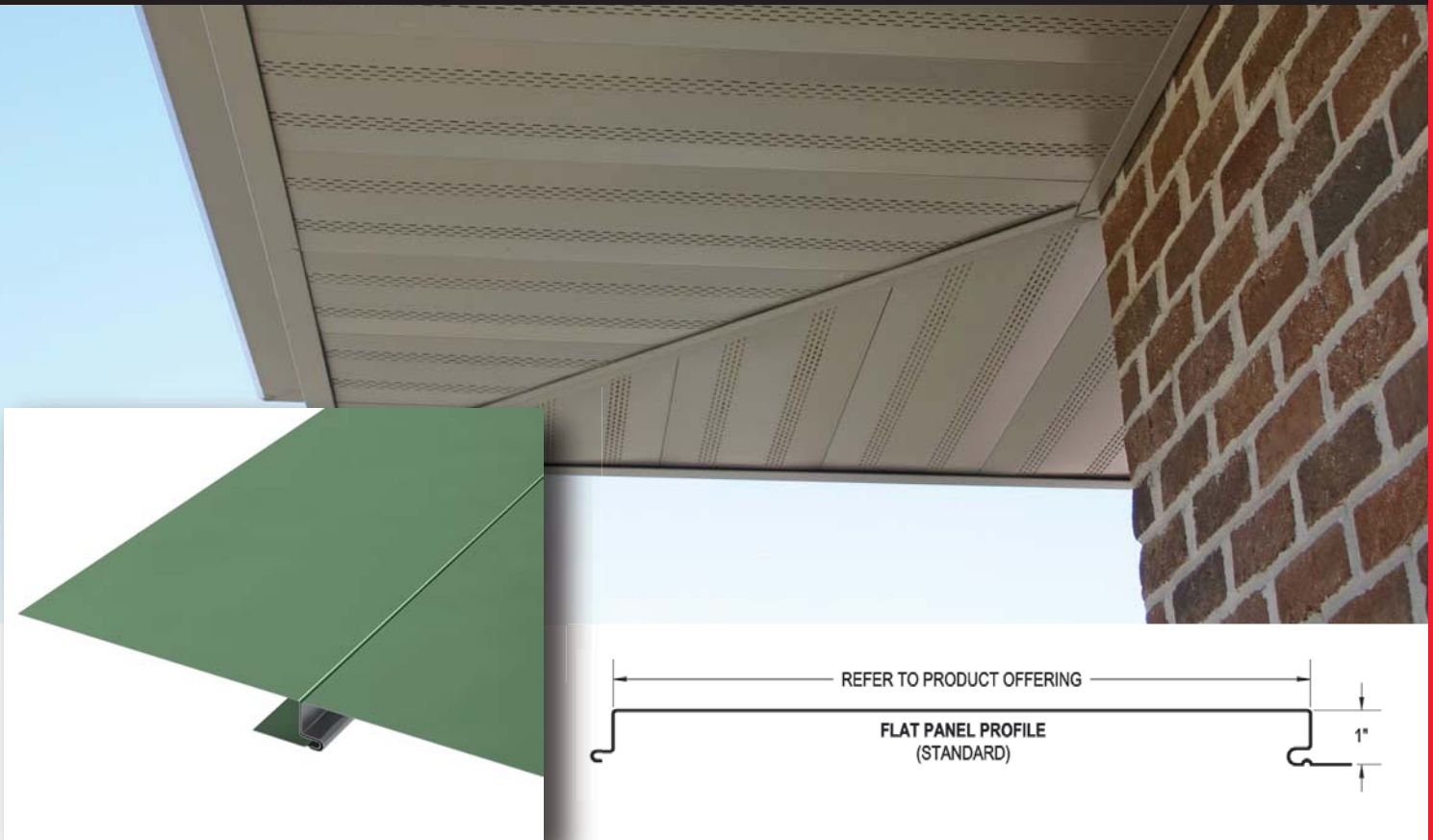
☐ - TOO LATE

BY

DATE

ADDITIONAL REMARKS

PUBLISHED IN ADDENDUM NUMBER -



FLUSH-PANEL FP10 is a commercial grade soffit panel system that provides a flush, aesthetic appearance upon installation. The product is an integral interlocking system by design which installs in one direction from a given starting point.

CONSTRUCTION ASSEMBLIES

FLUSH-PANEL FP10 may be applied over various supports including: light gauge framing, hat channels, wood stringers (each of which are to be spaced no more than 24" o.c.), or over a solid substrate.

PRODUCT USES AND APPLICATIONS

Product uses include soffit and fascia.

PRODUCT OFFERINGS

24 ga., 22 ga., 20 ga. Steel, and .032, .040 Aluminum,
24 ga. (.7mm), 22 ga. (.8mm) RHEINZINK®, and 16 oz., 20 oz. Copper

- FP1008 with 8" o.c. seams
- FP1012 with 12" o.c. seams
- FP1020 with 20" o.c. seams

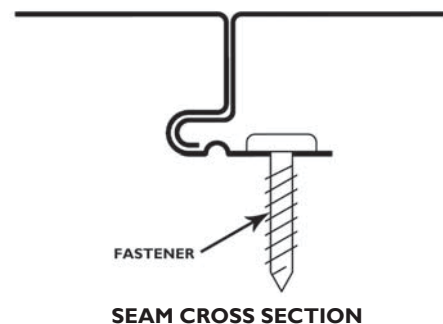
Lengths available from 3' up to 20'

PERFORMANCE TESTED

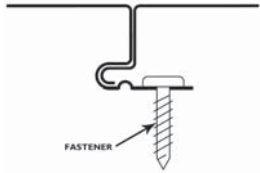
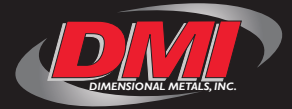
- ASTM E283 Air Leakage
- ASTM E331 Water Penetration
- ASTM E1592 Static Air Pressure

FP ADVANTAGES

- No Panel Clips: fast and easy installation
- 7.5% free air permeation with perforations (available in .032 aluminum only)



FLUSH-PANEL FP10



PROJECT NAME: _____
 ARCHITECT: _____
 INSTALLING CONTRACTOR: _____
 GENERAL CONTRACTOR: _____
 SPECIFICATION SECTION: _____

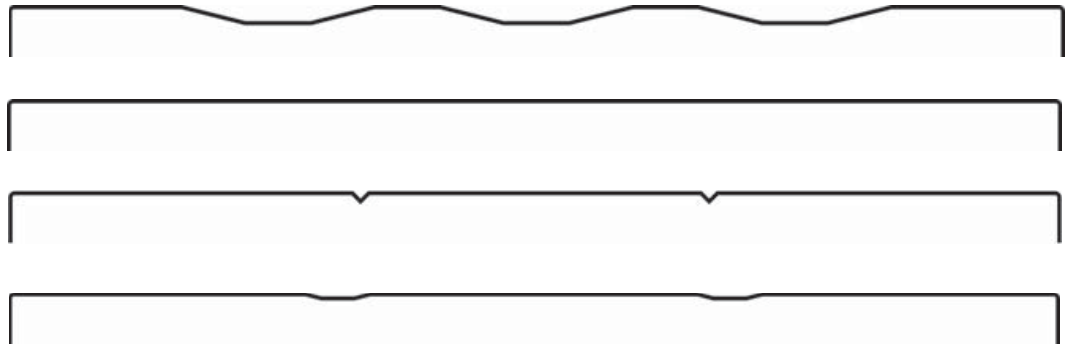
PROFILE

☐ STRIATIONS
(STANDARD)

☐ SMOOTH

☐ 2 HIGH BEAD

☐ 2 LOW BEAD



DynaClad® Standard Colors (IN ALPHABETICAL ORDER)	STOCKED AT DMI					
	24 GAGE GALVALUME	22 GAGE GALVALUME	.032 ALUM. 3105 H14	.040 ALUM. 3105 H14	.050 ALUM. 3105 H14	.063 ALUM. 3105 H14
AGED COPPER*	•		•			
BEIGE	•		•	•	•	
BRITE RED*	•		•	•		
BROWN	•		•	•		
BURGUNDY	•		•			
CHAMPAGNE*	•		•			
CHARCOAL GREY	•		•	•		
CLASSIC BRONZE	•		•	•		
COBALT BLUE	•		•			
COLONIAL RED	•		•	•		
DARK BRONZE	•	•	•	•	•	•
DOVE GREY	•		•	•		
EVERGREEN	•		•	•		
HARTFORD GREEN	•		•			
HEMLOCK GREEN	•		•			
LEAF GREEN	•		•			
MATTE BLACK	•		•	•		
METALLIC COPPER*	•		•			
METALLIC SILVER*	•		•			
MUSKET GREY	•		•	•		
PATINA COPPER	•		•	•		
PUTTY	•	•	•	•	•	
ROYAL BLUE	•		•	•		
SANDSTONE	•	•	•	•	•	
SEAPORT	•		•	•		
SLATE BLUE	•		•			
SLATE GREY	•		•	•	•	
SPARTAN BRONZE	•		•	•		
STONE	•		•	•		
TERRA COTTA	•		•			
WEATHERED ZINC*	•		•			
WHITE	•	•	•	•	•	•
MILL FINISHED ALUM.			•	•	•	•
ACRYLUME®	•	•				
CLEAR ANODIZED			•	•		

SUBSTRATE

- ☐ 24 GA. GALVALUME
☐ 22 GA. GALVALUME
☐ 20 GA. G-90
☐ 18 GA. G-90
☐ .032 ALUMINUM
☐ .040 ALUMINUM
☐ 16 OZ. COPPER
☐ 20 OZ. COPPER
☐ 24 GA. (.7MM) RHEINZINK®
☐ 22 GA. (.8MM) RHEINZINK®

EMBOSSED

- ☐ YES
☐ NO

Consult DMI for minimum quantities, upcharges, set up fees and extended lead times.

PERFORATED

- ☐ YES
☐ NO

Only available on .032 Aluminum and Copper

STANDARD FINISHES (NA ON COPPER)

- ☐ DYNACLAD® PVDF: _____
☐ ACRYLIC COATED GALVALUME (ACRYLUME)
☐ MILL FINISH ALUMINUM
☐ CLEAR ANODIZED ALUMINUM
☐ PREPATINA BLUE-GREY (RHEINZINK® ONLY)
☐ PREPATINA GRAPHITE-GREY (RHEINZINK® ONLY)

PREMIUM FINISHES*

- ☐ DYNACLAD® METALLIC PVDF: _____
☐ DYNACLAD® BRITE RED PVDF
☐ DYNACLAD® STANDARD COLOR PVDF W/CLEARCOAT (3-COAT): _____
☐ DYNACLAD® METALLIC COLOR PVDF W/CLEARCOAT (3-COAT): _____
☐ CUSTOM COLOR: _____

*Premium Colors subject to minimum quantities, extended lead times and upcharges. Consult DMI for details.

WARRANTY

- ☐ DYNACLAD® PAINT FINISH
☐ GALVALUME 20 YEAR - 6 MONTH (SUBSTRATE)

*Warranties not available for Rheinzink®

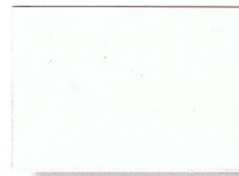
Non-Stock colors available subject to minimum quantities, additional lead times and upcharges.

** Denotes Premium Color - subject to additional costs.*

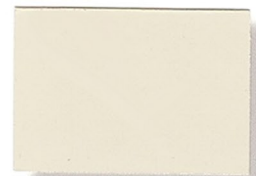
Dimensional Metals, Inc. has specialized in the manufacturing of Architectural Metal Panel Systems and Fabricated Architectural Sheet Metal for the construction industry since 1988. We use the most technologically advanced Fixed Base Roll-Forming Equipment to deliver complete in-house quality control over the manufacture of our products.



DYNACLAD® COLOR GUIDE



WHITE
TSR = .71 SRI = 86



PUTTY
TSR = .61 SRI = 73



SANDSTONE
TSR = .55 SRI = 64



PATINA COPPER
TSR = .47 SRI = 53



BRITE RED*
TSR = .43 SRI = 48



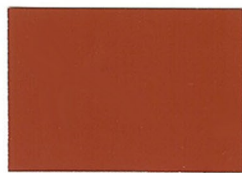
SLATE GREY
TSR = .39 SRI = 43



DOVE GREY
TSR = .38 SRI = 43



BEIGE
TSR = .37 SRI = 40



TERRA COTTA
TSR = .35 SRI = 37



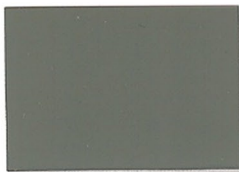
MUSKET GREY
TSR = .34 SRI = 36



SLATE BLUE
TSR = .34 SRI = 36



STONE
TSR = .33 SRI = 35



SEAPORT
TSR = .32 SRI = 33



SPARTAN BRONZE
TSR = .32 SRI = 33



CHARCOAL GREY
TSR = .30 SRI = 31



CLASSIC BRONZE
TSR = .29 SRI = 30



BURGUNDY
TSR = .27 SRI = 29



BROWN
TSR = .26 SRI = 26



COLONIAL RED
TSR = .26 SRI = 26



DARK BRONZE
TSR = .26 SRI = 26



HEMLOCK GREEN
TSR = .26 SRI = 26



LEAF GREEN
TSR = .26 SRI = 26



EVERGREEN
TSR = .25 SRI = 24



ROYAL BLUE
TSR = .25 SRI = 24



MATTE BLACK
TSR = .25 SRI = 24



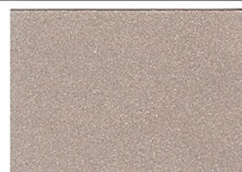
COBALT BLUE
TSR = .19 SRI = 17



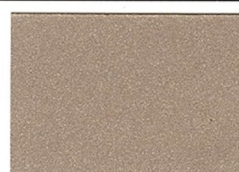
HARTFORD GREEN
TSR = .09 SRI = 3



AGED COPPER
TSR = .28 SRI = 28



METALLIC SILVER
TSR = .48 SRI = 55



CHAMPAGNE
TSR = .36 SRI = 39



METALLIC COPPER
TSR = .35 SRI = 37



WEATHERED ZINC
TSR = .27 SRI = 29

METALLIC COLORS CARRY AN UPCHARGE

Metallic Colors – Are directionally sensitive and therefore entire roof areas should be ordered at one time to ensure color uniformity. *Brite Red has a clear coat and carries an upcharge.
DMI Standard colors with a TSR of .25 or greater meet "Cool Color" criteria.

COLOR SAMPLES MAY VARY SLIGHTLY FROM ACTUAL MATERIAL

CUSTOM COLORS ARE AVAILABLE

PRODUCT - DynaClad®, Prefinished Architectural Sheet Metal, Tension Leveled, Coil and Flat Sheet Coated with a 70% Full Strength PVDF Paint Finish.

PRODUCT DESCRIPTION

Base Sheets

Coated on the top side with a polyester primer and a 70% full strength PVDF top coat for a total mil thickness of 1.1 (±.1). The reverse side is a polyester primer and a polyester topcoat with a total dry film thickness of .55 (±.1).

24 ga. or 22 ga. Galvalume® DynaClad®

Consists of aluminum-zinc alloy coated (55% aluminum, 43.4% zinc, 1.6% silicon, nominal percentage by weight) carbon steel of commercial weight meeting ASTM 792.

HDG90 DynaClad®

Consists of hot-dipped galvanized steel base sheet of commercial weight (AISI G90 designation) meeting ASTM A653.

.032, .040, .050, .063 Aluminum DynaClad®

Consists of 3105 H14 alloy aluminum base sheet of commercial weight meeting ASTM B209.

Sizes

Standard stocked Galvalume, G-90 and Aluminum are produced in a 48" wide coil. Standard sized flat sheets are 48" X 120". Custom sized flat sheets can be produced in various widths and lengths with extended lead times and additional costs.

Strippable Film

Is applied to the product to protect the paint finish and must be removed immediately after installation. Product should be stored in cool, shaded or covered areas with one side of the crate elevated to permit moisture run-off.

WARRANTY

A 20 year finish warranty covering color fade, chalking, and film integrity as well as a 20 year, 6 month perforation warranty (Galvalume® only) covering base sheet integrity is available at no additional cost.

STOCKING COLOR/MATERIAL AVAILABILITY

COLOR (IN ALPHABETICAL ORDER)	24 GAGE GALVALUME KYNAR 500	22 GAGE GALVALUME KYNAR 500	.032 ALUM. 3105 H14 KYNAR 500	.040 ALUM. 3105 H14 KYNAR 500	.050 ALUM. 3105 H14 KYNAR 500	.063 ALUM. 3105 H14 KYNAR 500
AGED COPPER	●		●			
BEIGE	●		●	●	●	
BRITE RED	●		●	●		
BROWN	●		●	●		
BURGUNDY	●		●			
CHAMPAGNE	●		●			
CHARCOAL GREY	●		●	●		
CLASSIC BRONZE	●		●	●		
COBALT BLUE	●		●			
COLONIAL RED	●		●	●		
DARK BRONZE	●	●	●	●	●	●
DOVE GREY	●		●	●		
EVERGREEN	●		●	●		
HARTFORD GREEN	●		●			
HEMLOCK GREEN	●		●			
LEAF GREEN	●		●			
MATTE BLACK	●		●	●		
METALLIC COPPER	●		●			
METALLIC SILVER	●		●			
MUSKET GREY	●		●	●		
PATINA COPPER	●		●	●		
PUTTY	●	●	●	●	●	
ROYAL BLUE	●		●	●		
SANDSTONE	●	●	●	●	●	
SEAPORT	●		●	●		
SLATE BLUE	●		●			
SLATE GREY	●		●	●	●	
SPARTAN BRONZE	●		●	●		
STONE	●		●	●		
TERRA COTTA	●		●			
WEATHERED ZINC	●		●			
WHITE	●	●	●	●	●	●
MILL FINISHED ALUM.			●	●	●	●
ACRYLUME®	●	●				
CLEAR ANODIZED			●	●		

COLORS LISTED ABOVE ARE AVAILABLE ON ANY OF THE SUBSTRATES BUT WILL HAVE ADDITIONAL LEAD TIMES AND COST.

DynaClad® is a registered trademark of Dimensional Metals, Inc.

TRINAR® is a registered trademark of Akzo Nobel, Inc.

Kynar 500® is a registered trademark of Arkema.

Hylar 5000® is a registered trademark of Ausimont USA, Inc.

Galvalume® is a registered trademark of BIEC International, Inc. and some of its licensed producers.

Acrylume® is a registered trademark of USX.

PERFORMANCE SPECIFICATION

ABRASION RESISTANCE (ASTM D 968)

Passed 60 Liters.

ACCELERATED WEATHERING (ASTM D 822, G 151, & G 153)

3,000 hours with no chalking, blistering or loss of adhesion.

ACID RESISTANCE (ASTM E 1308)

No visible changes.

ADHESION (ASTM D 3359)

No coating removed.

COLOR CHANGE (ASTM D 2244)

After 2,000 hours color change less than 2 NBS units.

FLAME TEST (ASTM E 84)

Class A / Class I

FLORIDA EXTERIOR DURABILITY (ASTM E 2244 & D 4214)

Less than 5ΔE units color change and chalk rating of less than 8.

FORMABILITY (ASTM D 522 & D 4145)

No adhesion loss on a 1/8" Mandrel and IT bend.

GLOSS (ASTM D 523)

15% (±5%) on 60 degrees.

HUMIDITY (ASTM D 2247)

1,000 hours Galvalume® and G-90 acceptable, no change.
3,000 hours Aluminum acceptable, no change.

IMPACT ADHESION (ASTM D 2794)

No cracking or loss of adhesion.

PENCIL HARDNESS (ASTM D 3363)

HB Minimum.

SALT SPRAY (ASTM B 117)

No blisters or adhesion loss after 1,000 hours for Galvalume® & G-90. No blisters or adhesion loss after 3,000 hours for Aluminum.



AKZO NOBEL



DYNACLAD® KYNAR 500® COATING 20 Year Limited Warranty

Dimensional Metals, Inc. (DMI) warrants for a period of twenty (20) years after Customer's shipment of painted products that Dimensional Metal's standard color, Medium Gloss DynaClad coil coatings (Coatings) when applied on Galvalume, HDG-90 steel and aluminum substrate will not:

- A. Peel, flake or otherwise lose adhesion to an extent that is apparent on ordinary outdoor visual observation.
- B. Change color more than 5 Delta E Units when measured per ASTM D-2244 on clean surface.
- C. Chalk more than a number eight (8) rating when measured per ASTM D-4214.

TERMS AND CONDITIONS

1. It is acknowledged that fading or color change may not be uniform if the surfaces are not equally exposed to the sun and elements. DMI recommends that there be a systematic fresh water rinse maintenance program in effect in areas of high salt concentration (such as adjacent to the seashore and/or industrial atmospheres) so as to prevent the accumulation of concentrated mineral deposits.
2. This Limited Warranty covers DMI Coatings exposed to normal atmospheric conditions and specifically excludes corrosive or aggressive atmospheres including direct salt spray. This Limited Warranty shall not apply where coating failure is the result of physical damage resulting from fabrication or embossing operations, corrosion due to cut edge exposure, salt spray, acts of God, vandalism, any negligent acts of the Customer including, but not limited to, improper packaging, storage, shipping, or, installation which prohibit proper drainage of standing water or other such occurrences beyond DMI's control.
3. DMI's liability shall not exceed the Customer's liability and the Customer's exclusive remedy for any breach of this Limited Warranty or failure of the Coatings is strictly limited to the direct cost of refinishing or replacing the failed coated metal. Refinishing of the failed coated metal shall be performed by using standard finishing practices and materials. DMI will, in all instances, be the sole judge as to whether refinishing or replacement of the failed areas is required to fulfill its obligation under this Limited Warranty and reserves the right to approve and negotiate the contract.
4. This Limited Warranty shall not be extended by the refinishing or replacement of the coated material, but the remaining warranty period shall continue in effect and be applicable to the refinished or replaced areas under the terms and conditions of the Limited Warranty.
5. Claims under this Limited Warranty must be presented in writing during the warranty period and within sixty (60) days after Customer becomes aware that any warranted condition has occurred. Time is of the essence and failure to give notice within the specified time shall discharge DMI from any obligations under this Limited Warranty. DMI must be given a reasonable opportunity to an on-site inspection to determine the cause and the corrective action to be taken if it is determined to be a Coating failure.
6. THIS LIMITED WARRANTY IS GIVEN AS THE EXCLUSIVE WARRANTY AND REMEDY, AND DMI DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. DMI SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. THE CUSTOMER'S EXCLUSIVE REMEDY SHALL BE THAT SET FORTH IN PARAGRAPH 3 FOR ANY CLAIM OF LIABILITY RELATING TO THE COATINGS UNDER NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY, OR ANY OTHER LEGAL THEORY.
7. This Limited Warranty is extended to Customer alone, is nontransferable and non-assignable, and may not be modified or enlarged in its scope by any representative, salesman, agent, or other employee of DMI. Customer shall not permit anyone to claim or imply that this Limited Warranty extends to anyone other than Customer. This condition is a material term of this Limited Warranty and its violation by Customer or its agents or representatives shall release DMI from its obligations hereunder.
8. This Limited Warranty shall be governed by and interpreted in accordance with the laws of the State of Ohio. Jurisdiction and venue for any dispute concerning the roof or this Limited Warranty are fixed in Franklin County, Ohio.

XXXXXXX

Project Name

XXXXXXX

Address

XXXXXXX

City

XX

State

XXXXX

Zip

XXXXXXX

Sold To

XXXXXXXXX

Address

XXXXXXXXX

City

XX

State

XXXXXX

Zip

Material Description

Invoice/ (Order Number)

Effective Date

Dimensional Metals, Inc.

58 Klema Drive North - Reynoldsburg, OH 43068 - (740) 927-3633

Signature

Title

Date



July 6, 2009

RE: Established LEED values

To Whom It May Concern:

Dimensional Metals, Inc. produces architectural metal panel systems and fabricated sheet metal products. Below you will find stated LEED values that may allow your project to qualify for possible credit points. These values have been established by raw material suppliers for Dimensional Metals, Inc.

Material resource credit 4.1 & 4.2 recycled content values

Type of roofing material	Total recycled content (%)	Post-consumer recycled (%)	Pre-consumer recycled (%)	Material weight per sqft
24 ga galvalume	31 %	23 %	7 %	1 lb
22 ga galvalume	31 %	23 %	7 %	1.25 lbs
.032 aluminum	90 %	68 %	22 %	.45 lbs
.040 aluminum	90 %	68 %	22 %	.575 lbs
.050 aluminum	90 %	68 %	22 %	.725 lbs

Material resource credit 5.1 & 5.2 regional materials:

Location of Dimension Metals, Inc. manufacturing facilities:
Reynoldsburg, Ohio 43068
Salisbury, North Carolina 28146

Credit 7.2, Heat Island Effect: Roof category

Using architectural metal roofing panels that meet the following Solar Reflective Index (SRI) ratings and covering at least 75% of the roof surface.

Low slope roof with a pitch less than 2:12 and SRI value of at least 78
Steep slope roof with a pitch greater than 2:12 and SRI value of at least 29

Refer to the solar reflectance index (SRI) number located on Dimensional Metals, Inc. standard cool color guide for each individual colors rating

A handwritten signature in black ink, appearing to read "Phillip Gastaldo".

Phillip Gastaldo
President



June 8, 2012

To whom it may concern:

Please be advised that DMI has been in business since 1988 and uses only domestically manufactured galvalume coated steel to manufacture our standing seam roofing and wall panel systems as well as all associated flat sheets required for trims and flashings for the roof and wall panel systems. Also, all DMI products are produced in our manufacturing plants located in Reynoldsburg, OH & Salisbury, NC.

If you have any questions do not hesitate to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "Philip L. Gastaldo". The signature is fluid and cursive, with the first name "Philip" and last name "Gastaldo" clearly distinguishable.

Philip L. Gastaldo, V. President

Cc: Steve Gastaldo-DMI Ohio South Sales

58 Klema Drive North – Reynoldsburg, OH 43068
Phone: 800-828-1510 Mobile: 614-582-0918 Fax: 866-709-3231
www.dmimetals.com philg@dmimetals.com



BIDDER'S SUBSTITUTION REQUEST FORM

Dimensional Metals, Inc. – 58 Klema Drive North – Reynoldsburg, OH 43068 – 800-828-1510

Gilbert Architects

ARCHITECT

626 N Charlotte St

STREET ADDRESS

Lancaster

PA

17603

CITY

STATE

ZIP

(717) 291-1077

(717) 392-3923

PHONE

FAX

Appoquinimink Sch District Bid Pack A Whitehall Elem Sch

ASD1701

PROJECT NAME

PROJECT NUMBER

We submit for your Consideration the following Product in addition to the specified Product for the above Project:

As per Section No. - **074113**

Paragraph No. - **2.2**

Specified Product - **Berridge M-Panel**

We submit our **WP72**

Panel System.

(Attached you will find technical data and any laboratory tests, if applicable.)

The following changes will take place to the Drawings and Specifications for the proposed substitution's proper installation:

- A. Dimension changes in drawings -
- B. DMI will or will not pay for changes to the design, including engineering and detailing costs caused by the substituted product -
- C. Affects on other installers -
- D. Differences between our panel and panel specified -
- E. Warranty differences -

The undersigned states that the function, appearance, and quality are equivalent or superior to the specified Product.

Submitted By:

Tom Erbe

11/17/2017

NAME

DATE

Dimensional Metals Inc. (DMI)

COMPANY NAME5

58 Klema Dr.

STREET ADDRESS

Reynoldsburg

OH

43068

CITY

STATE

ZIP

(800) 828-1510

(866) 853-5269

PHONE

FAX

FOR ARCHITECT'S USE ONLY

☐ - ACCEPTED

☐ - ACCEPTED AS NOTED

☐ - NOT ACCEPTED

☐ - TOO LATE

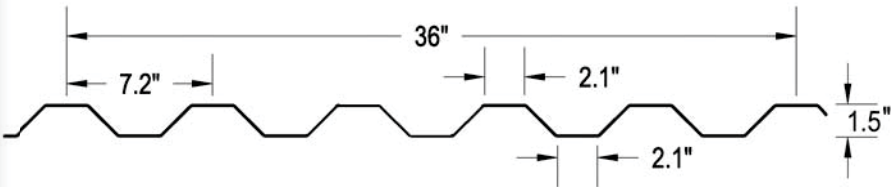
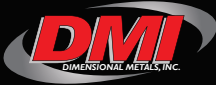
BY

DATE

ADDITIONAL REMARKS

PUBLISHED IN ADDENDUM NUMBER -

7.2-PANEL WP72



7.2 PANEL WP72 symmetrical design allows for versatility in applications while providing a clean industrial look. It is an exposed fastener panel utilized for wall and roof applications. It has a 1-1/2" rib height at 7.2" o.c. and 36" of panel coverage with a purlin bearing leg.

ROOF ASSEMBLIES

7.2 PANEL WP72 can be applied over various wall and roof assemblies including: open framing and solid substrates.

PRODUCT USES AND APPLICATIONS

Product uses include vertical and horizontal wall panels, equipment screens, mansards and roofing with roof slopes as low as 2:12. Excellent panel for wall retro-fit applications.

STANDARD PRODUCT OFFERINGS

24 ga., 22 ga., 20 ga., 18 ga. Steel, and
.032, .040, .050 Aluminum
Embossing available
Perforations available (Aluminum and Stainless Steel)

PERFORMANCE TESTED

- ASTM E283 Air Leakage
 - ASTM E331 Water Penetration
- Mitered Corners are available.

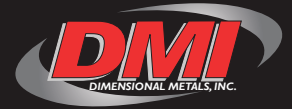
LOAD TABLE - UNIFORM SPANS (PSF)

Panel Gage	Span	Span (Feet)					
		4.00	5.00	6.00	7.00	8.00	9.00
24 (50 ksi)	3	70.00	60.00	50.00	40.00	30.00	20.00
22 (50 ksi)	3	120.00	100.00	80.00	55.00	40.00	30.00
24 (50 ksi)	2	70.00	60.00	50.00	40.00	30.00	25.00
22 (50 ksi)	2	110.00	90.00	70.00	50.00	40.00	30.00

Table for live load, no wind increase included. Deflection limit = L/240.
Analysis per AISI 2001 manual. Additional spans available - Contact DMI

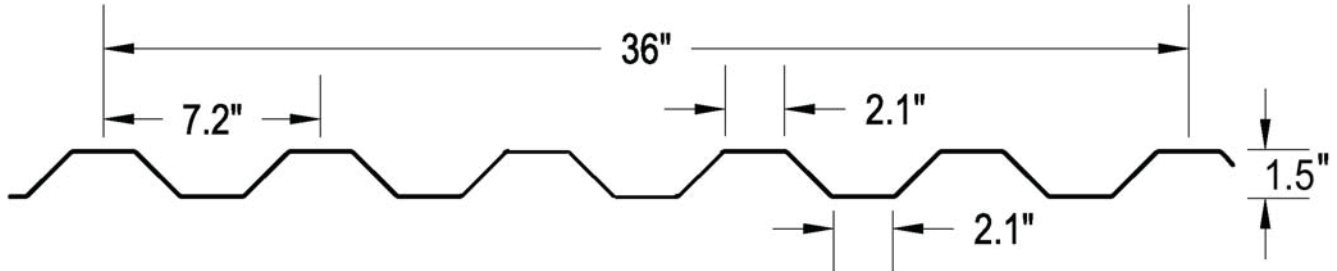
Watertightness warranty available for wall applications only.

7.2-PANEL SUBMITTAL



PROJECT NAME: _____
ARCHITECT: _____
INSTALLING CONTRACTOR: _____
GENERAL CONTRACTOR: _____
SPECIFICATION SECTION: _____

PROFILE



DynaClad® Standard Colors (IN ALPHABETICAL ORDER)	STOCKED AT DMI					
	24 GAGE GALVALUME	22 GAGE GALVALUME	.032 ALUM. 3105 H14	.040 ALUM. 3105 H14	.050 ALUM. 3105 H14	.063 ALUM. 3105 H14
AGED COPPER*	●		●			
BEIGE	●		●		●	
BRITE RED*	●		●	●		
BROWN	●		●	●		
BURGUNDY	●		●			
CHAMPAGNE*	●		●			
CHARCOAL GREY	●		●	●		
CLASSIC BRONZE	●		●	●		
COBALT BLUE	●		●			
COLONIAL RED	●		●	●		
DARK BRONZE	●	●	●	●	●	●
DOVE GREY	●		●	●		
EVERGREEN	●		●	●		
HARTFORD GREEN	●		●			
HEMLOCK GREEN	●		●			
LEAF GREEN	●		●			
MATTE BLACK	●		●	●		
METALLIC COPPER*	●		●			
METALLIC SILVER*	●		●			
MUSKET GREY	●		●	●		
PATINA COPPER	●		●	●		
PUTTY	●	●	●	●	●	
ROYAL BLUE	●		●	●		
SANDSTONE	●	●	●	●	●	
SEAPORT	●		●	●		
SLATE BLUE	●		●			
SLATE GREY	●		●	●	●	
SPARTAN BRONZE	●		●	●		
STONE	●		●	●		
TERRA COTTA	●		●			
WEATHERED ZINC*	●		●			
WHITE	●	●	●	●	●	●
MILL FINISHED ALUM.			●	●	●	●
ACRYLUME®	●	●				
CLEAR ANODIZED			●	●		

SUBSTRATE

- ☐ 24 GA. GALVALUME
☐ 22 GA. GALVALUME
☐ 20 GA. G-90
☐ 18 GA. G-90
☐ .032 ALUMINUM
☐ .040 ALUMINUM
☐ .050 ALUMINUM

☐ OTHER: _____

EMBOSSED

- ☐ YES
☐ NO

Consult DMI for minimum quantities, upcharges, set up fees and extended lead times

STANDARD FINISHES

- ☐ DYNACLAD®PVDF: _____
☐ ACRYLIC COATED GALVALUME (ACRYLUME)
☐ MILL FINISH ALUMINUM
☐ CLEAR ANODIZED ALUMINUM

PREMIUM FINISHES*

- ☐ DYNACLAD®METALLIC PVDF: _____
☐ DYNACLAD®BRITE RED PVDF
☐ DYNACLAD®STANDARD COLOR PVDF W/CLEARCOAT (3-COAT): _____
☐ DYNACLAD®METALLIC COLOR PVDF W/CLEARCOAT (3-COAT): _____
☐ CUSTOM COLOR: _____

*Premium Colors subject to minimum quantities, extended lead times and upcharges. Consult DMI for details.

WARRANTY

- ☐ DYNACLAD®PAINT FINISH
☐ GALVALUME 20 YEAR - 6 MONTH (SUBSTRATE)
☐ WALL PANEL WEATHERTIGHTNESS WARRANTY _____

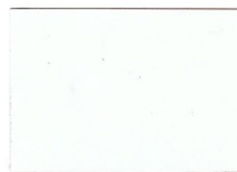
Non-Stock colors available subject to minimum quantities, additional lead times and upcharges.

** Denotes Premium Color - subject to additional costs.*

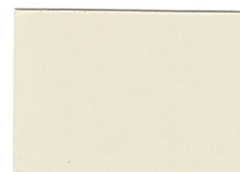
Dimensional Metals, Inc. has specialized in the manufacturing of Architectural Metal Panel Systems and Fabricated Architectural Sheet Metal for the construction industry since 1988. We use the most technologically advanced Fixed Base Roll-Forming Equipment to deliver complete in-house quality control over the manufacture of our products.



DYNACLAD® COLOR GUIDE



WHITE
TSR = .71 SRI = 86



PUTTY
TSR = .61 SRI = 73



SANDSTONE
TSR = .55 SRI = 64



PATINA COPPER
TSR = .47 SRI = 53



BRITE RED*
TSR = .43 SRI = 48



SLATE GREY
TSR = .39 SRI = 43



DOVE GREY
TSR = .38 SRI = 43



BEIGE
TSR = .37 SRI = 40



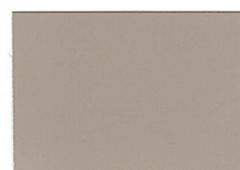
TERRA COTTA
TSR = .35 SRI = 37



MUSKET GREY
TSR = .34 SRI = 36



SLATE BLUE
TSR = .34 SRI = 36



STONE
TSR = .33 SRI = 35



SEAPORT
TSR = .32 SRI = 33



SPARTAN BRONZE
TSR = .32 SRI = 33



CHARCOAL GREY
TSR = .30 SRI = 31



CLASSIC BRONZE
TSR = .29 SRI = 30



BURGUNDY
TSR = .27 SRI = 29



BROWN
TSR = .26 SRI = 26



COLONIAL RED
TSR = .26 SRI = 26



DARK BRONZE
TSR = .26 SRI = 26



HEMLOCK GREEN
TSR = .26 SRI = 26



LEAF GREEN
TSR = .26 SRI = 26



EVERGREEN
TSR = .25 SRI = 24



ROYAL BLUE
TSR = .25 SRI = 24



MATTE BLACK
TSR = .25 SRI = 24



COBALT BLUE
TSR = .19 SRI = 17



HARTFORD GREEN
TSR = .09 SRI = 3



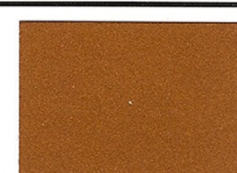
AGED COPPER
TSR = .28 SRI = 28



METALLIC SILVER
TSR = .48 SRI = 55



CHAMPAGNE
TSR = .36 SRI = 39



METALLIC COPPER
TSR = .35 SRI = 37



WEATHERED ZINC
TSR = .27 SRI = 29

METALLIC COLORS CARRY AN UPCHARGE

Metallic Colors – Are directionally sensitive and therefore entire roof areas should be ordered at one time to ensure color uniformity. *Brite Red has a clear coat and carries an upcharge.
DMI Standard colors with a TSR of .25 or greater meet "Cool Color" criteria.

COLOR SAMPLES MAY VARY SLIGHTLY FROM ACTUAL MATERIAL

CUSTOM COLORS ARE AVAILABLE

PRODUCT - DynaClad®, Prefinished Architectural Sheet Metal, Tension Leveled, Coil and Flat Sheet Coated with a 70% Full Strength PVDF Paint Finish.

PRODUCT DESCRIPTION

Base Sheets

Coated on the top side with a polyester primer and a 70% full strength PVDF top coat for a total mil thickness of 1.1 (±.1). The reverse side is a polyester primer and a polyester topcoat with a total dry film thickness of .55 (±.1).

24 ga. or 22 ga. Galvalume® DynaClad®

Consists of aluminum-zinc alloy coated (55% aluminum, 43.4% zinc, 1.6% silicon, nominal percentage by weight) carbon steel of commercial weight meeting ASTM 792.

HDG90 DynaClad®

Consists of hot-dipped galvanized steel base sheet of commercial weight (AISI G90 designation) meeting ASTM A653.

.032, .040, .050, .063 Aluminum DynaClad®

Consists of 3105 H14 alloy aluminum base sheet of commercial weight meeting ASTM B209.

Sizes

Standard stocked Galvalume, G-90 and Aluminum are produced in a 48" wide coil. Standard sized flat sheets are 48" X 120". Custom sized flat sheets can be produced in various widths and lengths with extended lead times and additional costs.

Strippable Film

Is applied to the product to protect the paint finish and must be removed immediately after installation. Product should be stored in cool, shaded or covered areas with one side of the crate elevated to permit moisture run-off.

WARRANTY

A 20 year finish warranty covering color fade, chalking, and film integrity as well as a 20 year, 6 month perforation warranty (Galvalume® only) covering base sheet integrity is available at no additional cost.

STOCKING COLOR/MATERIAL AVAILABILITY

COLOR (IN ALPHABETICAL ORDER)	24 GAGE GALVALUME KYNAR 500	22 GAGE GALVALUME KYNAR 500	.032 ALUM. 3105 H14 KYNAR 500	.040 ALUM. 3105 H14 KYNAR 500	.050 ALUM. 3105 H14 KYNAR 500	.063 ALUM. 3105 H14 KYNAR 500
AGED COPPER	●		●			
BEIGE	●		●	●	●	
BRITE RED	●		●	●		
BROWN	●		●	●		
BURGUNDY	●		●			
CHAMPAGNE	●		●			
CHARCOAL GREY	●		●	●		
CLASSIC BRONZE	●		●	●		
COBALT BLUE	●		●			
COLONIAL RED	●		●	●		
DARK BRONZE	●	●	●	●	●	●
DOVE GREY	●		●	●		
EVERGREEN	●		●	●		
HARTFORD GREEN	●		●			
HEMLOCK GREEN	●		●			
LEAF GREEN	●		●			
MATTE BLACK	●		●	●		
METALLIC COPPER	●		●			
METALLIC SILVER	●		●			
MUSKET GREY	●		●	●		
PATINA COPPER	●		●	●		
PUTTY	●	●	●	●	●	
ROYAL BLUE	●		●	●		
SANDSTONE	●	●	●	●	●	
SEAPORT	●		●	●		
SLATE BLUE	●		●			
SLATE GREY	●		●	●	●	
SPARTAN BRONZE	●		●	●		
STONE	●		●	●		
TERRA COTTA	●		●			
WEATHERED ZINC	●		●			
WHITE	●	●	●	●	●	●
MILL FINISHED ALUM.			●	●	●	●
ACRYLUME®	●	●				
CLEAR ANODIZED			●	●		

COLORS LISTED ABOVE ARE AVAILABLE ON ANY OF THE SUBSTRATES BUT WILL HAVE ADDITIONAL LEAD TIMES AND COST.

DynaClad® is a registered trademark of Dimensional Metals, Inc.

TRINAR® is a registered trademark of Akzo Nobel, Inc.

Kynar 500® is a registered trademark of Arkema.

Hylar 5000® is a registered trademark of Ausimont USA, Inc.

Galvalume® is a registered trademark of BIEC International, Inc. and some of its licensed producers.

Acrylume® is a registered trademark of USX.

PERFORMANCE SPECIFICATION

ABRASION RESISTANCE (ASTM D 968)

Passed 60 Liters.

ACCELERATED WEATHERING (ASTM D 822, G 151, & G 153)

3,000 hours with no chalking, blistering or loss of adhesion.

ACID RESISTANCE (ASTM E 1308)

No visible changes.

ADHESION (ASTM D 3359)

No coating removed.

COLOR CHANGE (ASTM D 2244)

After 2,000 hours color change less than 2 NBS units.

FLAME TEST (ASTM E 84)

Class A / Class I

FLORIDA EXTERIOR DURABILITY (ASTM E 2244 & D 4214)

Less than 5ΔE units color change and chalk rating of less than 8.

FORMABILITY (ASTM D 522 & D 4145)

No adhesion loss on a 1/8" Mandrel and IT bend.

GLOSS (ASTM D 523)

15% (±5%) on 60 degrees.

HUMIDITY (ASTM D 2247)

1,000 hours Galvalume® and G-90 acceptable, no change.
3,000 hours Aluminum acceptable, no change.

IMPACT ADHESION (ASTM D 2794)

No cracking or loss of adhesion.

PENCIL HARDNESS (ASTM D 3363)

HB Minimum.

SALT SPRAY (ASTM B 117)

No blisters or adhesion loss after 1,000 hours for Galvalume® & G-90. No blisters or adhesion loss after 3,000 hours for Aluminum.



AKZO NOBEL



DYNACLAD® KYNAR 500® COATING 20 Year Limited Warranty

Dimensional Metals, Inc. (DMI) warrants for a period of twenty (20) years after Customer's shipment of painted products that Dimensional Metal's standard color, Medium Gloss DynaClad coil coatings (Coatings) when applied on Galvalume, HDG-90 steel and aluminum substrate will not:

- A. Peel, flake or otherwise lose adhesion to an extent that is apparent on ordinary outdoor visual observation.
- B. Change color more than 5 Delta E Units when measured per ASTM D-2244 on clean surface.
- C. Chalk more than a number eight (8) rating when measured per ASTM D-4214.

TERMS AND CONDITIONS

1. It is acknowledged that fading or color change may not be uniform if the surfaces are not equally exposed to the sun and elements. DMI recommends that there be a systematic fresh water rinse maintenance program in effect in areas of high salt concentration (such as adjacent to the seashore and/or industrial atmospheres) so as to prevent the accumulation of concentrated mineral deposits.
2. This Limited Warranty covers DMI Coatings exposed to normal atmospheric conditions and specifically excludes corrosive or aggressive atmospheres including direct salt spray. This Limited Warranty shall not apply where coating failure is the result of physical damage resulting from fabrication or embossing operations, corrosion due to cut edge exposure, salt spray, acts of God, vandalism, any negligent acts of the Customer including, but not limited to, improper packaging, storage, shipping, or, installation which prohibit proper drainage of standing water or other such occurrences beyond DMI's control.
3. DMI's liability shall not exceed the Customer's liability and the Customer's exclusive remedy for any breach of this Limited Warranty or failure of the Coatings is strictly limited to the direct cost of refinishing or replacing the failed coated metal. Refinishing of the failed coated metal shall be performed by using standard finishing practices and materials. DMI will, in all instances, be the sole judge as to whether refinishing or replacement of the failed areas is required to fulfill its obligation under this Limited Warranty and reserves the right to approve and negotiate the contract.
4. This Limited Warranty shall not be extended by the refinishing or replacement of the coated material, but the remaining warranty period shall continue in effect and be applicable to the refinished or replaced areas under the terms and conditions of the Limited Warranty.
5. Claims under this Limited Warranty must be presented in writing during the warranty period and within sixty (60) days after Customer becomes aware that any warranted condition has occurred. Time is of the essence and failure to give notice within the specified time shall discharge DMI from any obligations under this Limited Warranty. DMI must be given a reasonable opportunity to an on-site inspection to determine the cause and the corrective action to be taken if it is determined to be a Coating failure.
6. THIS LIMITED WARRANTY IS GIVEN AS THE EXCLUSIVE WARRANTY AND REMEDY, AND DMI DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. DMI SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. THE CUSTOMER'S EXCLUSIVE REMEDY SHALL BE THAT SET FORTH IN PARAGRAPH 3 FOR ANY CLAIM OF LIABILITY RELATING TO THE COATINGS UNDER NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY, OR ANY OTHER LEGAL THEORY.
7. This Limited Warranty is extended to Customer alone, is nontransferable and non-assignable, and may not be modified or enlarged in its scope by any representative, salesman, agent, or other employee of DMI. Customer shall not permit anyone to claim or imply that this Limited Warranty extends to anyone other than Customer. This condition is a material term of this Limited Warranty and its violation by Customer or its agents or representatives shall release DMI from its obligations hereunder.
8. This Limited Warranty shall be governed by and interpreted in accordance with the laws of the State of Ohio. Jurisdiction and venue for any dispute concerning the roof or this Limited Warranty are fixed in Franklin County, Ohio.

XXXXXXX

Project Name

XXXXXXX

Address

XXXXXXX

City

XX

State

XXXXX

Zip

XXXXXXX

Sold To

XXXXXXXXX

Address

XXXXXXXXX

City

XX

State

XXXXXX

Zip

Material Description

Invoice/ (Order Number)

Effective Date

Dimensional Metals, Inc.

58 Klema Drive North - Reynoldsburg, OH 43068 - (740) 927-3633

Signature

Title

Date



July 6, 2009

RE: Established LEED values

To Whom It May Concern:

Dimensional Metals, Inc. produces architectural metal panel systems and fabricated sheet metal products. Below you will find stated LEED values that may allow your project to qualify for possible credit points. These values have been established by raw material suppliers for Dimensional Metals, Inc.

Material resource credit 4.1 & 4.2 recycled content values

Type of roofing material	Total recycled content (%)	Post-consumer recycled (%)	Pre-consumer recycled (%)	Material weight per sqft
24 ga galvalume	31 %	23 %	7 %	1 lb
22 ga galvalume	31 %	23 %	7 %	1.25 lbs
.032 aluminum	90 %	68 %	22 %	.45 lbs
.040 aluminum	90 %	68 %	22 %	.575 lbs
.050 aluminum	90 %	68 %	22 %	.725 lbs

Material resource credit 5.1 & 5.2 regional materials:

Location of Dimension Metals, Inc. manufacturing facilities:
Reynoldsburg, Ohio 43068
Salisbury, North Carolina 28146

Credit 7.2, Heat Island Effect: Roof category

Using architectural metal roofing panels that meet the following Solar Reflective Index (SRI) ratings and covering at least 75% of the roof surface.

Low slope roof with a pitch less than 2:12 and SRI value of at least 78
Steep slope roof with a pitch greater than 2:12 and SRI value of at least 29

Refer to the solar reflectance index (SRI) number located on Dimensional Metals, Inc. standard cool color guide for each individual colors rating

A handwritten signature in black ink, appearing to read "Phillip Gastaldo". The signature is fluid and cursive, written over a light grey circular background that contains the word "LEED" and other faint text.

Phillip Gastaldo
President



June 8, 2012

To whom it may concern:

Please be advised that DMI has been in business since 1988 and uses only domestically manufactured galvalume coated steel to manufacture our standing seam roofing and wall panel systems as well as all associated flat sheets required for trims and flashings for the roof and wall panel systems. Also, all DMI products are produced in our manufacturing plants located in Reynoldsburg, OH & Salisbury, NC.

If you have any questions do not hesitate to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "Philip L. Gastaldo". The signature is fluid and cursive, with the first name "Philip" and last name "Gastaldo" clearly distinguishable.

Philip L. Gastaldo, V. President

Cc: Steve Gastaldo-DMI Ohio South Sales

58 Klema Drive North – Reynoldsburg, OH 43068
Phone: 800-828-1510 Mobile: 614-582-0918 Fax: 866-709-3231
www.dmimetals.com philg@dmimetals.com



2000 West Marshall Dr. • Grand Prairie, TX 75051
800-527-3322 • 972-337-7100 • FAX 972-337-7600

November 7, 2017

Robert Hershey
Appoquinimink School District
118 S. Sixth St., Box 4010
Odessa, DE 19730

Re: Appoquinimink School District - Bid Package A Whitehall Elementary School

Dear Bob,

Please accept this submission to add Husky Yellow Guard 10 mil to the Appoquinimink School District - Bid Package A Whitehall Elementary School project as an approved under slab vapor barrier. Poly-America's 10 mil Husky Yellow Guard meets and exceeds ASTM E-1745, Class A, B and C (standard specification for plastic water vapor retarders used in contact with soil or granular fill under concrete slabs).

Proposed Substitution: Husky Yellow Guard 10 mil by Poly-America
Item: CFYG1014-210Y – 10 mil 14'x210'
Manufacturer Address: 2000 W Marshall Dr, Grand Prairie, TX 75051
Product Literature: Attached
Section/Page: 033000-6 Cast-in-Place Concrete – Item 2.7

See the table below for a direct comparison of Husky Yellow Guard and Stego Wrap.

10 Mil	Perm Rate	Permeance	Tensile Strength	Puncture Resistance
Husky Yellow Guard	0.0126 WVTR	0.028 Perms	50 (lbf/in)	3500 g
Stego Wrap*	(not listed)	0.0254 Perms	50.6 (lbf/in)	3006 g

*Data from <http://www.stegoindustries.com>

There are no schedule changes with this substitution, no extra costs, and no changes for other trades. Please do not hesitate to call me with any questions you may have.

Best Regards,

Kelley Johnston

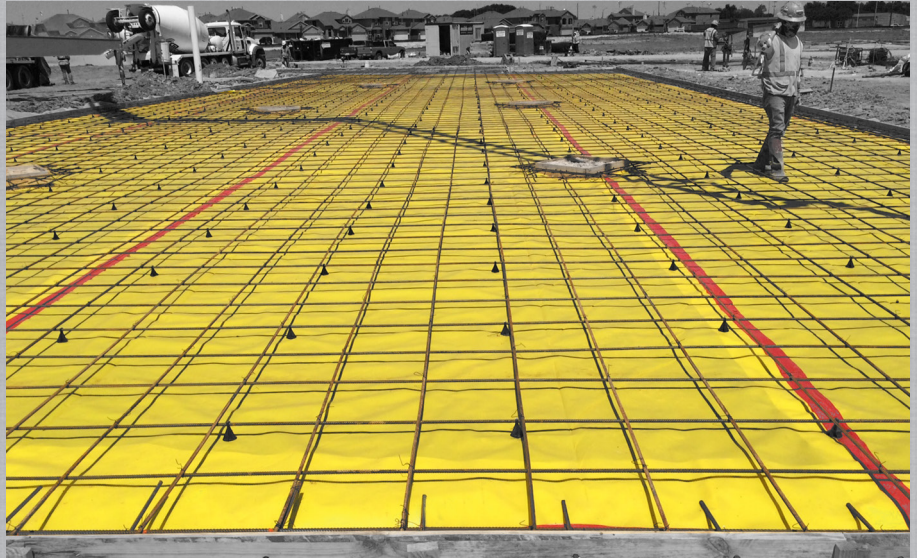
Poly-America, L.P.
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800-527-3322, ext. 7430
Fax: 972-337-8430
kelleyj@poly-america.com
www.poly-america.com
www.linkedin.com/in/kelleyjohnston/

Yellow Guard®

**10 MIL
CLASS A**

VAPOR RETARDER

Husky® Yellow Guard® vapor retarders are waterproofing membranes manufactured using top-quality polyethylene (polyolefin) resins. Husky® Yellow Guard® vapor retarders are manufactured to be used in contact with soil and granular fill under concrete slabs, beams, and footings, and provide exceptionally low water vapor permeance. Husky® Yellow Guard® vapor retarders are manufactured by Poly-America, an industry leader in the manufacture of polyethylene films. Poly-America utilizes state-of-the-art processing equipment.



VAPOR RETARDER HIGHLIGHTS

- Developed for use as a durable vapor retarder.
- Formulated from top-quality polyethylene (polyolefin) resins.
- Exceeds industry-standard ASTM E 1745 Class A, Class B, and Class C specifications.
- Restricts migration of soil gases such as radon and methane.
- Exceptionally low water vapor permeance, three times lower than industry-standard ASTM E 1745 Class A requirement.
- Manufactured by Poly-America on state-of-the-art manufacturing equipment with full-time on-line quality monitoring and routine laboratory testing.
- Maintains low water vapor permeance even after exposure to severe field conditions.
- Outstanding tensile properties and puncture resistance.
- Excellent resistance to low-temperature brittleness.
- Available nationwide.

Manufacturing Quality Control & Quality Assurance

All resins, additives, and concentrates for use in Husky® Yellow Guard® vapor retarders must meet Poly-America's stringent raw material specifications. Husky® Yellow Guard® vapor retarder is manufactured with continuous process-control monitoring and is routinely tested in Poly-America's state-of-the-art laboratory during and after production.

In addition, Husky® Yellow Guard® vapor retarder has been tested by accredited independent laboratories to ensure that it meets ASTM E 1745 Class A, Class B, and Class C specifications.

Installation

Installation of Husky® Yellow Guard® vapor retarder, including placement, lap joints, pipe penetrations, protection, repair, and suggested field check list, shall be in accordance with ASTM E 1643 standard practice and the project specifications and plans.

Availability

Husky® Yellow Guard® 10 mil vapor retarders are available nationwide. Visit www.yellowguard.com for more information.

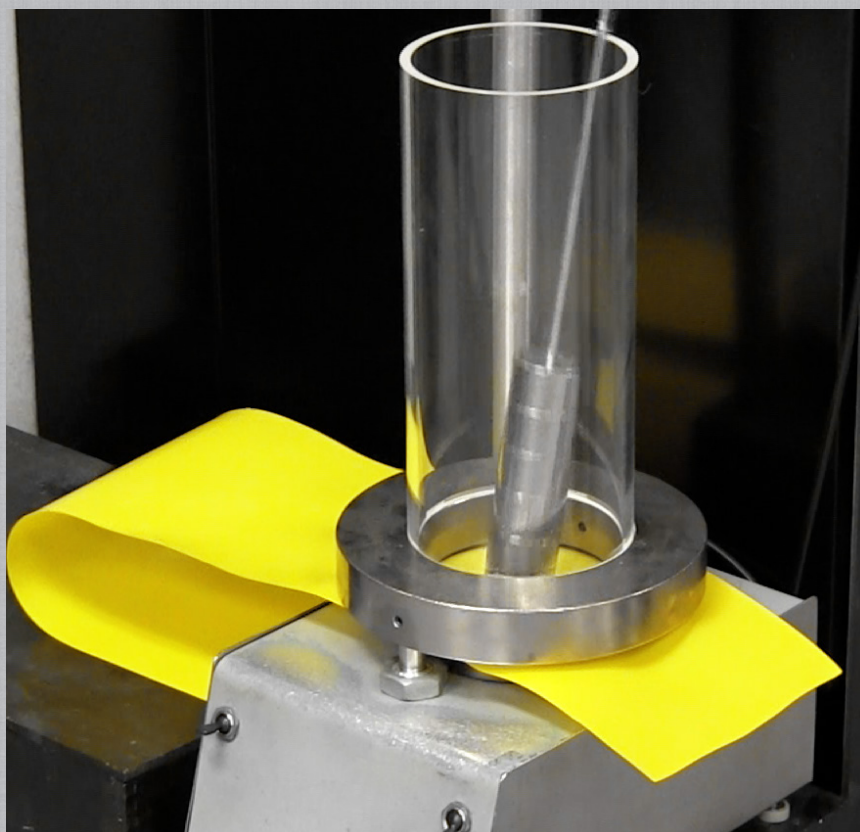
PROPERTIES OF 10 MIL HUSKY® YELLOW GUARD® CLASS A VAPOR RETARDER

Properties	Test Method	ASTM E 1745 Class A Requirements	Yellow Guard® Vapor Retarder Test Result*	Measures
Permeance	ASTM F 1249	0.1 perms	0.028 perms/**0.0126 WVTR	Resistance to water vapor
Puncture Resistance	ASTM D 1709 Method B	2200 g	3500 g	Impact energy required to cause failure
Tensile Strength	ASTM D 882	45.0 lbf/in	50 lbf/in	Force required to break/rupture film
Permeance After Conditioning (ASTM F 1249)	ASTM E 154			Resistance to water vapor after:
	Section 8	0.1 perms	0.030 perms	-wetting, drying, and soaking
	Section 11	0.1 perms	0.031 perms	-heat conditioning
	Section 12	0.1 perms	0.031 perms	-low-temperature conditioning
	Section 13	0.1 perms	0.032 perms	-soil organism exposure
Thickness			10 mils	
Roll Dimensions			14 ft x 210 ft	
Roll Weight			142.4 lbs	

*All values are typical values and may vary within industry tolerances.

**WVTR (Water Vapor Transmission Rate) in g/(100 in² · day)

Perm = grains/(ft² · hr · inHg)



Limited Replacement Warranty

Poly-America provides a limited replacement warranty on Husky® Yellow Guard® vapor retarder representing that the vapor retarder is free from material defects for a period of 1 year from the date of sale. The specific details of Poly-America's limited replacement warranty are available at <http://www.yellowguard.com/limitedwarranty.pdf>.

Poly-America

2000 W. Marshall Dr. • Grand Prairie, TX 75051

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The information provided herein has been compiled by Poly-America, L.P. and to the best of our knowledge accurately represents Poly-America's Yellow Guard® vapor retarders at the time of publication. This publication is offered "as is," for preliminary planning purposes only, without any warranties of any kind. Final determination of suitability of this information or these products for the use contemplated and its manner of use is the sole responsibility of the end user. Poly-America, L.P. assumes no liability in connection with the use of this information and these products. This information is subject to change without notice.

57-023-0085 Rev 08/15

Yellow Guard Vapor Barrier Independent Laboratory Test Results

Material: Vapor Barrier
Thickness: 10 mils
Color: Yellow
Composition: Polyolefin Membrane
Specification: ASTM E 1745 Class A

Poly-America, L.P. certifies that the 10mil Yellow Guard meets the requirements of ASTM E 1745 Class A.

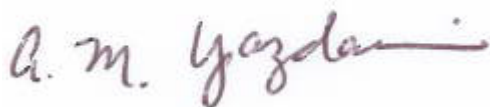
All tests were performed by reputable independent laboratories at their locations as indicated.

Material Property	Test Method	Result	Unit	Date
Water Vapor Permeance ¹	ASTM F 1249	0.0248	grains/ft ² *hr*inHg	8/13/2013
Water Vapor Permeance ²	ASTM E 96 Method B	0.0240	grains/ft ² *hr*inHg	9/26/2013
Tensile Strength (Machine Direction) ³	ASTM D 882	57.2	lbf/in	9/6//2013
Tensile Strength (Transverse Direction) ³	ASTM D 882	59.9	lbf/in	9/6//2013
Puncture Resistance (Dart Impact) ³	ASTM D 1709 Method B	6,973	grams	8/23/2013
Puncture Resistance ³	ASTM D 4833	97	Newtons	10/21/2013

1. Average of 2 replicates. Mocon Testing Services, Minneapolis, MN

2. Ghesquirere Plastics Testing, Inc., Harper Woods, MI

3. TRI/Environmental, Inc., Austin, TX



Date: 6/18/2014

A.M. Yazdani, MSc., P.E.
Technical Services
Poly-America, L.P.
(972) 337-7314



Installation Instructions

Husky® Yellow Guard® Vapor Barrier should be installed according to ASTM E 1643. The installation team should have a full copy of ASTM E 1643 available. If they do not, please go to www.astm.org or call Kelley Johnston at 972-337-7430 for assistance.

Key points of ASTM E 1643 for Husky® Yellow Guard® Vapor Barrier installation:

1. Inspect the surface. Be sure that it is level and free of sharp objects and standing water.
2. Deploy Husky® Yellow Guard® Vapor Barrier in the long direction, allowing for the fewest number of seams.
3. Overlap Husky® Yellow Guard® Vapor Barrier by 6" and tape immediately with Husky™ Yellow Guard™ tape.
4. Treat footers, grade beams, pile caps, and/or perimeter as recommended by the architect or structural engineer
5. Repair any holes with a 6-inch patch and tape around the edges of the patch with Husky™ Yellow Guard™ tape.
6. Wrap and tape pipes as seen in the Husky® Yellow Guard® Vapor Barrier pipe penetration details.

Poly-America

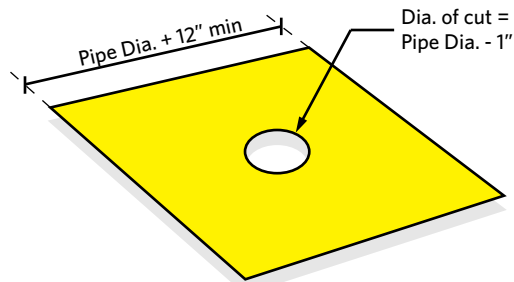
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Install Instructions Rev 08/15 (4865)

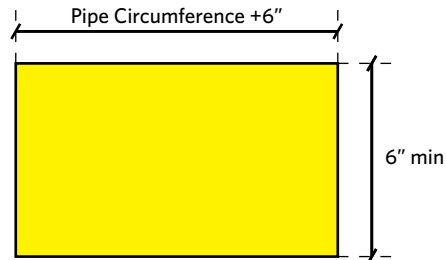
HUSKY® Yellow Guard® VAPOR BARRIER

Pipe Penetration Detail 1

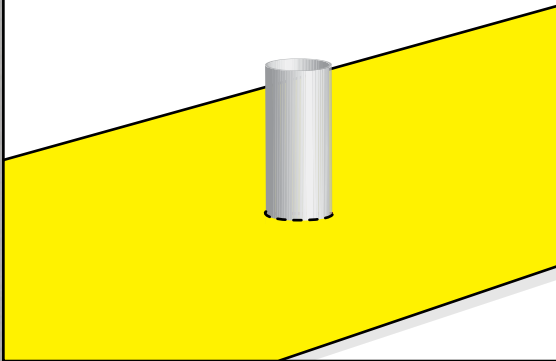
1. Prepare a square piece of Husky® Yellow Guard® vapor barrier with a hole in the center.



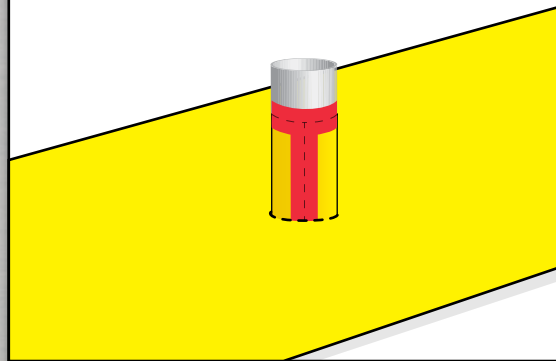
2. Prepare pipe boot.



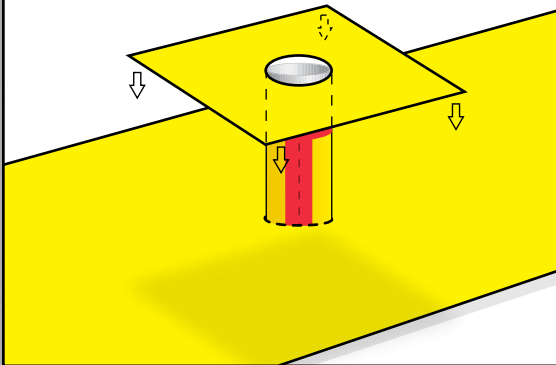
3. Cut a circle in the Husky® Yellow Guard® vapor barrier for pipe penetration.



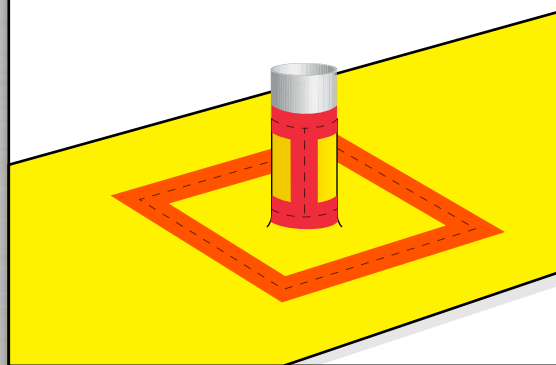
4. Wrap and tape boot around pipe.



5. Push square piece down over pipe for a tight fit all the way to the base of pipe with a 1/2" lip.



6. Tape the square piece to the pipe boot and around all edges.



Not To Scale

The drawings and information provided herein have been compiled by Poly-America, L.P. and to the best of our knowledge accurately represent Poly-America's Yellow Guard® vapor barriers at the time of publication. These drawings and information are offered "as is," for preliminary planning purposes only, without any warranties of any kind. Final determination of suitability of these drawings and information or products for the use contemplated and its manner of use are the sole responsibility of the end user. Poly-America, L.P. assumes no liability in connection with the use of this information and these products. This information is subject to change without notice.

Poly-America

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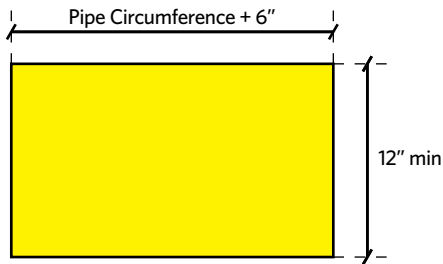
Detail 1 Rev 08/15 (4865)

HUSKY[®] Yellow Guard[®]

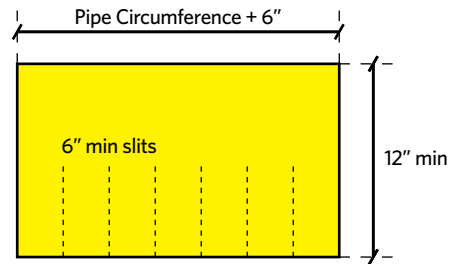
VAPOR BARRIER

Pipe Penetration Detail 2

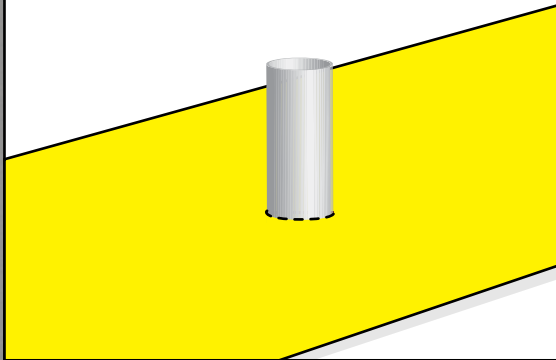
1. Cut a piece of Husky[®] Yellow Guard[®] vapor barrier.



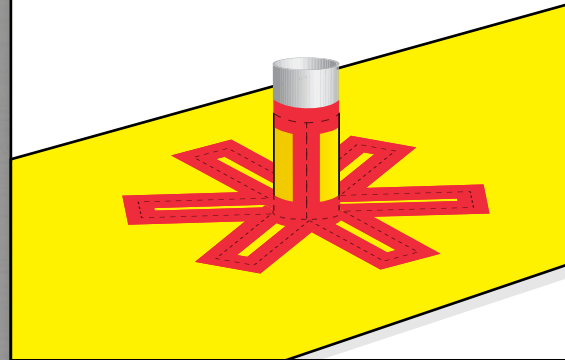
2. Cut 6\"/>



3. Cut a circle in the Yellow Guard[®] panel for pipe penetration.



4. Wrap and tape the film boot around the pipe with the unslit film on the pipe and the slit film on the ground.



Not To Scale

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Poly-America

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Detail 2 Rev 08/15 (4865)

Question #31 - CG 101 Markup

