

I.B.P. SHARPLINE 700 SERIES-TECHNICAL SPECIFICATION

SECTION 07410-PERFORMED METAL SIDING

PART 1 – GENERAL

1.01 SCOPE OF WORK

- A. Furnish all labor, materials, equipment and incidentals required to install the preformed metal siding as hereinafter specified.
- B. These Specifications are intended to give a general description of what is required, but do not cover all details which will vary in accordance with the requirements of the specific application. It is, however, intended to cover the furnishing, the shop testing, the delivery and complete installation and field testing of all materials, equipment and all appurtenances for the complete installation, whether specifically mentioned in these Specifications or not.

1.02 DESCRIPTION OF WORK

- A. Extent of each type of preformed metal siding is indicated on the drawings and by provisions of this section.
- B. Provide all materials, erection labor, and means of construction required for the execution of work of this Section in accordance with Contract Documents.
- C. Provide secondary purlin/girt supporting members and any other miscellaneous plates, supports, etc. necessary for panel attachment and a completed weathering system.

1.03 QUALITY ASSURANCE

- A. *Performance Test Standards:* Provide preformed panel system which have been pretested and certified by manufacturer to provide specified resistance to air and water infiltration and structural deflection and failure when installed as indicated and when tested ASTM.
- B. *Field Measurements:* Where possible, prior to fabrication of prefabricated panels, take field measurements of structure or substrates to receive panel units where final dimensions cannot be established prior to fabrication.
- C. *Manufacturer:* Manufacturer shall have a minimum of ten (10) years experience in manufacturing and installing coordinating installation of this type of system.
- D. *Installer:* Installer shall have a minimum of ten (10) years experience in applying this type of material with successful completion of projects of similar scope. Applicator shall be “certified or approved” by manufacturer.

1.04 SUBMITTALS

- A. *Product Data:* Submit manufacture’s product specifications, standard details, certified product test results, installation instructions and general recommendations, as applicable to materials and finishes for each component and for total system of preformed panels.

B. Samples: Submit two (2) samples 12" square, of each exposed finish material

C. Shop Drawings:

- a. Vertical Panel work - Sub-contractor and/or panel manufacturer to submit small scale layouts of panels on walls and roofs, and large-scale details of edge conditions, joints, corners, custom profiles, supports, anchorages, trim, flashings, closures, and special details. Distinguish between factory and field assembly work.
- b. Horizontal Panel work - Panel manufacturer to provide shop drawings and work in concert with the customer for shop drawing approval. This is necessary to allow the manufacturer to make the determinations on panel lengths, type of panel joint, corner size, design, method of fastening and flashing design to ensure product acceptance.

PART 2 - PRODUCTS

2.02 MANUFACTURER (Wall Panels)

A. Basic of Design: Subject to compliance with requirements, provide preformed siding products as manufactured by:

1. Width: 12", 16"
2. Gauge: .040" thickness aluminum, 24 or 22 Ga Galvanized Steel
3. Alloy: 3003 H-14 aluminum ASTM 525 Galvanized Steel
4. Surface: Smooth
5. Dim. Between Flutes: 2", 3", 4", 4 1/2"
6. Panel Flute Width: 1 1/2", 2", 3", 4"
7. Panel Depth: 1", 1 1/2"
8. Flute Shape: 90 degree return edges, perpendicular to wall surface.
9. Flute Bend Sharp Radii: 1/16" maximum

B. Finish: Kynar 500, 70% Ployvinylidene (PVF2) coating, 1.0 total film thickness, 20 year warranty, custom colors as selected by owner and/or architect.

2.03 MISCELLANEOUS MATERIALS

A. Fasteners: Manufacturer's standard noncorrosive types. All fasteners in direct contact with dissimilar materials shall be stainless steel.

B. Accessories: Except as indicated as work of another specification section provide components required for a complete wall panel system, including trim, copings, etc. As necessary to provide a complete and watertight system. Match materials/finishes of performed panels.

2.04 PANEL FABRICATION: PERFORMANCES

A. General: Panels shall be fabricated with press brake dies using manufactures standard procedures and processes, and as required to fulfill indicated performances requirements which have been demonstrated by factory testing. Comply with indicated profile and dimensional requirements.

B. Panels not complying with the above design and 1/16" max radii for the crisp corner extruded look shall be bid as alternate. Panels manufactured by roll form machines are not acceptable.

C. Metal Gages: Thickness required for structural performance, but not less than manufacture's recommended minimums for profiles and applications indicated.

- D. Maximum lengths: Provide formed units of sufficient length to eliminate horizontal joints in finished wall surface.

2.05 ASSEMBLY DETAILS

- A. Secondary sub-panels shall be minimum 20 ga. by size indicated in the Contract Documents. Galvanized pressed metal sub-panels played at right angles to ribs of interior wall units and spaced approximate 4'-0" on center.
- B. Flashings, closures, corner flashings for metal wall panels shall be of the same material and gage as specified for wall panel, unless indicated otherwise.
- C. Fasteners shall be secured with minimum # 12-14 cadmium plated box head self-drilling tek' unless indicated otherwise.
- D. Vapor Barrier: TYVEK over exterior grade sheathing, plywood or rigid insulation (completely sealed system) shall be provided by other trades.
- E. Mitered Corners Shall be notched, formed using a 48 hour pressure laminated corner system free of welds or exposed fasteners. (no welding – no pop rivets – no exposed fasteners).

PART 3 – EXECUTION

3.01 INSTALLATION

- A. General: Comply with panel fabricator's and material manufacturer's instructions and recommendations for installation, as applicable to project conditions and supporting substrates. Anchor panels and other components of the work securely in place, with provisions for thermal/structural movement.
- B. Installer Qualifications: The wall panel erector shall have a minimum of ten (10) years experience installing siding products of similar design, installation and successful completion. Provide a list of five similar completed projects with addresses of the project, location, architect, owner and year completed.
- C. Install panels with concealed fasteners with expansion cleats.
- D. Installation Tolerances: Shim and align panel units within installed tolerance of 1/4" in 20'-0" on level/plumb/slope and location/line as indicated, and within 1/8" offset of adjoining faces and of alignment of matching profiles. Workmanship shall conform to standards set forth in the "Architectural Sheet Metal Manual" as published by SMACNA.
- E. Joint Sealers: Install gaskets, joint fillers and sealants where indicated and where required for weatherproof performance of panel systems. Provide types of gaskets and sealants/fillers as recommended by manufacturer.
- F. Refer to other sections of these specifications for product and installation requirements applicable to indicated joint sealers.
- G. Do not allow panels or trim to come into contact with dissimilar materials.

3.02 DELIVERY, STORAGE AND HANDLING

- A. Delivery, storage and handling shall be in accordance with manufacture's instructions and recommendations. In addition, store material out of weather in a clear and dry place. Care shall be taken to avoid contact with any substance which may cause discoloration in the finish during storage. Store materials to provide ventilation and prevent denting, abrasion or twisting.

3.03 CLEANING AND PROTECTION

- A. Damaged Units: Replace panels and other components of the work which have been damaged or have deteriorated beyond successful repair by means of finish touch-up or similar minor repair procedures.
- B. Cleaning: Remove temporary protective covering and strippable films (if any) as each panel is installed. Upon completion of panel installation, clean finished surfaces as recommended by panel manufacturer, and maintain in a clean condition during construction.

END OF SECTION