

**COLORADO MOUNTAIN COLLEGE
VETERINARY TECHNOLOGY BUILDING**



**Roofing Bid
3000 County Road 114
Garfield County, Colorado**

PROJECT SPECIFICATIONS

01300	ADMINISTRATIVE REQUIREMENTS
01600	PRODUCT REQUIREMENTS
05310	METAL DECKING
07210	ROOF INSULATION
07440	METAL ROOF PANEL

SECTION 01300 - ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.1 PROJECT MANAGEMENT AND COORDINATION

- A. Coordinate construction to ensure efficient and orderly installation of each part of the Work.
- B. Conduct progress meetings at Project site every week as necessary. Notify Colorado Mountain College of meeting dates and times. Require attendance of each subcontractor or other entity concerned with current progress or involved with planning or coordination of future activities.
 - 1. Upon Owner request, record minutes and distribute to parties involved.
- C. Contractor to work closely with on-site personnel to identify intake air locations, and sequence construction such that roofing application within 15 feet of these areas is coordinated with unit turn off within a four hour period.

1.2 SUBMITTAL PROCEDURES

- A. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 1. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing.
 - 2. Submittals from sources other than Contractor will not be accepted.
 - 3. Identify deviations from the Contract Documents, failure to do so will result in rejection.
 - 4. Submit three copies of each submittal.
- B. Place a permanent label or title block on each submittal for identification. Provide a 4- by 5-inch space on the label or beside title block to record review and approval markings and action taken. Include the following information on the label:
 - 1. Project name.
 - 2. Date.
 - 3. Name and address of Contractor.
 - 4. Name and address of subcontractor or supplier.
 - 5. Number and title of appropriate Specification Section.
- C. Owner will review each submittal, mark as appropriate to indicate action taken, and return copies less those retained. Compliance with specified requirements remains Contractor's responsibility.
- D. Construction Schedule Submittal Procedure:
 - 1. Submit schedule within ten business days after date established for Commencement of the Work. Distribute copies to Owner, subcontractors, and parties required to comply with dates.
 - 2. Revise the schedule after each meeting or activity where revisions have been made. As Work progresses, mark each bar to indicate actual completion. Distribute revised copies to Owner, subcontractors, and parties required to comply with dates.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

- A. Product Data: Mark each copy to show applicable choices and options. Include the following:
 - 1. Data indicating compliance with specified standards and requirements.
 - 2. Notation of coordination requirements.
- B. Shop Drawings: Submit Project-specific information drawn to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data. Submit 1 reproducible print and 1 blue- or black-line print on sheets at least 8-1/2 by 11 inches but no larger than 24 by 36 inches. Include the following:
 - 1. Dimensions, profiles, methods of attachment, large scale details, and other information, as appropriate for the Work.
 - 2. Identification of products and materials.
 - 3. Notation of coordination requirements.
 - 4. Notation of dimensions established by field measurement.
- C. Samples: Submit Samples finished as specified and identical with the material proposed. Where variations are inherent in the material, submit sufficient units to show full range of the variations. Include name of manufacturer and product name on label.

2.2 INFORMATION SUBMITTALS

- A. Construction Schedule: Prepare a horizontal bar-chart Contractor's construction schedule.
 - 1. Provide a separate time bar for each activity, and a vertical line to identify the first workday of each week.
 - 2. Coordinate each element with other activities. Show each activity in proper sequence. Indicate sequences necessary for completion of related Work.
 - 3. Indicate Substantial Completion and allow time for Owner's procedures necessary for certifying Substantial Completion.
- B. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements.
- C. Warranties: Provide all product specified warranties on manufacturer's letterhead

PART 3 - EXECUTION (Not Applicable)

End of Section

SECTION 01600 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Provide products of same kind from a single source. The term "product" includes the terms "material," "equipment," "system," and similar terms.
- B. Product Substitutions: Substitutions include products and methods of construction differing from that required by the Contract Documents and proposed by Contractor.
 - 1. Submit three copies of each request for product substitution.
 - 2. Submit requests in time to permit processing of request and subsequent submittals, if any, sufficiently in advance of when materials are required in the Work. Do not submit unapproved substitutions on Shop Drawings or other submittals.
 - 3. Identify product to be replaced and provide complete documentation showing compliance of proposed substitution with applicable requirements. Include a full comparison with the specified product, a list of changes to other Work required to accommodate the substitution, and the proposed reduction in the Contract Sum or the Contract Time should the substitution be accepted.
 - 4. Architect will review the proposed substitution and notify Contractor of its acceptance or rejection.
- C. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - 2. Deliver products to Project site in manufacturer's original sealed container or packaging, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 3. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
 - 4. Store materials in a manner that will not endanger Project structure.
 - 5. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.

PART 2 - PRODUCTS

2.1 PRODUCT OPTIONS

- A. Select products to comply with all of the following that are applicable:
 - 1. Where a product or manufacturer is named, provide the item indicated. No substitutions will be permitted without prior approval by the Architect.
 - 2. Where a product is described with required characteristics, provide a product that complies with those characteristics.
 - 3. Where compliance with performance requirements is specified, provide products that comply and are recommended in writing by the manufacturer for the application.

4. Where compliance with codes, regulations, or standards, is specified, select a product that complies with the codes, regulations, or standards referenced.
- B. Unless otherwise indicated, Architect will select color, pattern, and texture of each product from manufacturer's full range of standard options.

PART 3 - EXECUTION (Not Applicable)

End of Section

SECTION 05310- METAL DECKING

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. This Specification for Steel Roof Deck shall govern the materials, design, and erection of cold formed steel deck used for the support of roofing materials, design live loads and SDI construction loads.

1.2 REFERENCES

- A. American Iron and Steel Institute (AISI) Standard -North American Specification for the Design of Cold-Formed Steel Structural Members, 2001 Edition with Supplement 2004
- B. American Welding Society -ANSI/AWS D1.3 Structural Welding Code/Sheet Steel - 98 Structural Welding Code - Sheet Steel
- C. American Society for Testing and Materials (ASTM) A653 (A653M)-06, A924 (A924M)-06, A1008 (A1008M)-06
- D. American Society of Civil Engineering (ASCE) –SEI/ASCE7-05
- E. Underwriters Laboratories (UL) Fire Resistance Directory -<http://www.ul.com/database> 2006

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Sheet steel for galvanized deck shall conform to ASTM A653 (A653M) Structural Quality, with a minimum yield strength of 33 ksi (230 MPa).
- B. Sheet steel for cold rolled plus painted deck shall conform to ASTM A1008 (A1008M) with a minimum yield strength of 33 ksi (230 MPa). Other structural sheet steels or high strength low alloy steels are acceptable, and shall be selected from the North American Specification for the Design of Cold-Formed Steel Structural Members.
- C. Provide deck type E24

2.2 TOLERANCE

- A. Panel length shall be within plus or minus 1/2 inch of specified length.
- B. Panel cover width shall be no greater than minus, 3/8 inch plus 3/4 inch.
- C. Panel camber and/or sweep shall be no greater than 1/4 inch in 10 foot length.
- D. Panel end out of square shall not be greater than 1/8 inch per foot of panel width.

PART 3 - EXECUTION

3.1 GENERAL

- A. Support framing and field conditions shall be examined for compliance with requirements for installation tolerances and other conditions affecting performance of work of this section. All OSHA rules for erection shall be followed.
- B. Deck panels and accessories shall be installed according to the SDI Manual of Construction with Steel Deck, placement plans, and requirements of this Section.

- C. Deck panels shall be placed on structural supports and adjusted to final position with ends aligned, and attached securely to the supports immediately after placement in order to form a safe working platform. All deck sheets shall have adequate bearing and fastening to all supports to prevent slip off during construction. Deck ends over supports shall be installed with a minimum end bearing of 1-1/2 inches. Deck areas subject to heavy or repeated traffic, concentrated loads, impact loads, wheel loads, etc. shall be adequately protected by planking or other approved means to avoid overloading and/or damage.
- D. Lapped or Butted Ends: Deck ends shall be either lapped or butted over supports. Gaps up to 1 inch shall be permitted at butted ends.
- E. Deck units and accessories shall be cut and neatly fit around openings and other work projecting through or adjacent to the decking.

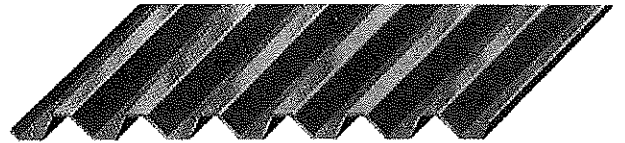
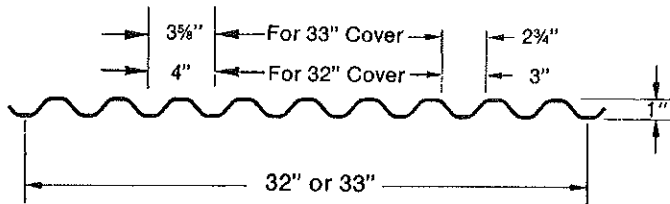
3.2 INSTALLATION

- A. Roof deck units shall be anchored to steel supporting members including perimeter support steel and/or bearing walls by mechanical fasteners. Anchorage shall provide lateral stability to the top flange of the supporting structural members and resist the following minimum gross uplifts; 45 pounds per square foot (2.15 kPa) for eave overhang; 30 pounds per square foot (1.44 kPa) for all other roof areas. The dead load of the roof deck construction shall be deducted from the above forces.
- B. Mechanical fasteners: #10 self drilling screws

End of Section

1.0 E

Maximum Sheet Length 42'-0"
Extra Charge for Lengths Under 6'-0"



ROOF

SECTION PROPERTIES

Deck Type	Design Thick.	Weight (PSF)		I in ⁴ /ft	Sp in ³ /ft	Sn in ³ /ft	Fy KSI
		Ptd.	Galv.				
E26	0.0179	0.96	1.06	0.041	0.067	0.071	60
E24	0.0239	1.28	1.38	0.058	0.098	0.103	60
E22	0.0295	1.57	1.67	0.073	0.130	0.134	60
E20	0.0358	1.91	2.01	0.088	0.167	0.165	60

Type E deck provides a very economical roof deck for use on shorter spans. 1" or more rigid insulation should be used with Type E deck. Installation of rigid insulation should be with mechanical fasteners.

This deck also lends itself for use as a building siding.

VERTICAL LOADS FOR TYPE 1.0E

No. of Spans	Deck Type	Max. SDI Const Span	Allowable Total (Dead + Live) Uniform Load (PSF)										
			Span (ft.-in.) C. to C. of Support										
			2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"
1	E26	2'-10"	178	107	71	51	39	31	26	22	20	18	16
	E24	3'-5"	249	148	97	68	51	40	32	27	24	21	19
	E22	3'-10"	316	187	122	85	63	48	39	32	27	24	21
	E20	4'-2"	379	224	145	100	73	56	45	37	31	27	24
2	E26	3'-4"	273	189	139	107	81	62	49	40	34	29	25
	E24	4'-0"	396	275	202	153	111	83	65	52	43	37	32
	E22	4'-6"	515	357	263	190	137	102	79	63	52	44	37
	E20	5'-0"	634	440	323	227	162	121	94	74	61	51	43
3	E26	3'-4"	310	198	128	89	66	51	40	33	28	25	22
	E24	4'-0"	469	276	177	122	89	67	53	43	36	31	27
	E22	4'-6"	588	344	221	151	109	82	64	52	43	36	31
	E20	5'-0"	707	413	264	180	129	97	75	60	50	42	36

- Notes:
1. Load tables are calculated using sectional properties based on the steel design thickness shown in the Steel Deck Institute (SDI) Design Manual.
 2. Loads shown in the shaded areas are governed by the live load deflection not in excess of 1/240 of the span. A dead load of 10 PSF has been included.

SECTION 07220- ROOF INSULATION

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. Contractor will provide rigid insulation on roof decking.

1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM D-2178-, Standard Specification for Asphalt Glass Felts used in Roofing and Waterproofing.
 - 2. ASTM D-4601-, Specification for Asphalt-Coated Glass Fiber Base Sheet Used in Roofing.
 - 3. ASTM D-5147-, Sampling and Testing Modified Bituminous Sheet Material.
- B. National Roofing Contractors Association (NRCA):
 - 1. Roofing and Waterproofing Manual.
- C. Underwriters Laboratories, Inc. (UL):
 - 1. Fire Hazard Classifications.
- D. Insulation Board, Polyisocyanurate (FS HH-I-1972)
- E. Insulation Board, Thermal (Fiberboard) (FS LLL-1-535B)

1.4 SUBMITTALS

- A. Product Data: Provide manufacturer's specification data sheets for each product in accordance with Section 01300.
- B. Certification
 - 1. Submit roof manufacturer's certification that insulation fasteners furnished are acceptable to roof manufacturer.
 - 2. Submit roof manufacturer's certification that insulation furnished is acceptable to roofing manufacturer as a component of roofing system and is eligible for roof manufacturer's system warranty.

1.5 QUALITY ASSURANCE

- A. Fire Classification, ASTM E-108

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver products to site with seals and labels intact, in manufacturer's original containers, dry and undamaged.
- B. Store all insulation materials in a manner to protect them from the wind, sun and moisture damage prior to and during installation. Any insulation that has been exposed to any moisture shall be removed from the project site.
- C. Keep materials enclosed in a watertight, ventilated enclosure (i.e. tarpaulins).
- D. Store materials off the ground. Any warped, broken or wet insulation boards shall be removed from the site.

PART 2 - PRODUCTS

2.1 INSULATION MATERIALS

1. High Density Fiberboard Roof Insulation; ASTM C-208

Board Size: [Four feet by four feet (4' x 4')]

Thickness: Minimum 1 1/2" board, 6" minimum coverage

2.3 RELATED MATERIALS

A. Protection/ Cover Board: 5/8" exterior grade plywood

B. Fasteners

1. Collared, flathead, self tapping, corrosion resistant screw fastener as recommended by manufacturer in length sufficient to penetrate cover board through rigid insulation and 3/4" minimum through metal decking

PART 3 - EXECUTION

3.1 INSPECTION OF SURFACES

A. Roofing contractor shall be responsible for preparing an adequate substrate to receive insulation.

1. Verify that work which penetrates roof deck has been completed.
2. Verify that fasteners are properly and securely installed.
3. Examine surfaces for defects, rough spots, ridges, depressions, foreign material, moisture, and unevenness.
4. Do not proceed until defects are corrected.
5. Do not apply insulation until substrate is sufficiently dry.
6. Broom clean substrate immediately prior to application.

3.2 INSTALLATION

1. All boards shall be cut and fitted where the roof deck intersects a vertical surface. The boards shall be cut to fit a minimum of one quarter (1/4) inch away from the vertical surface.
2. Install no more insulation at one time than can be roofed on the same day.

Attachment with Mechanical Fasteners.

1. Approved insulation board shall be fully attached to the deck with an approved mechanical fastening system. As a minimum, the amount of fasteners shall be in accordance with manufacturer's recommendation based on EAS-70.
2. Filler pieces of insulation require at least two fasteners per piece if size of insulation is less than four square feet.
3. Spacing pattern of fasteners shall be as per manufacturer's recommendations to meet the FM requirements. Placement of any fastener from edge of insulation board shall be a minimum of three inches, and a maximum of six (6) inches.

End of Section

SECTION 07410 –SHEET METAL ROOFING

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Work described in this section includes pre-formed metal roofing system complete with clips, perimeter and penetration flashing, and closures.

1.2 RELATED SECTIONS

- A. Section 07220 – Rigid Insulation

1.3 REFERENCES

- A. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- B. ASTM A 792/A 792M - Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.
- C. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
- D. ASTM E 1646 - Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference.
- E. SMACNA - Architectural Sheet Metal Manual.
- F. NRCA - The NRCA Roofing and Waterproofing Manual.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's catalog data, detail sheets, and specifications. Include manufacturer's detailed material and system description, sealant and closure installation instructions, engineering performance data and finish specifications. Indicate fastener types and spacing; and required fastener pullout values.
- C. Shop Drawings: Prepared specifically for this project; showing dimensions of metal roofing and
- D. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.

1.5 QUALITY ASSURANCE

- A. Engage an experienced metal roofing contractor to install standing seam system who has a minimum of three (3) years experience specializing in the installation of structural standing seam metal roof systems.
- B. Contractor must be certified by manufacturer specified as supplier of structural standing seam system and obtain written certification from manufacturer that installer is approved for installation of specified system. If requested, contractor must supply owner with a copy of this certification.
- C. Successful contractor is required to maintain a full-time supervisor/foreman who is on the job-site at all times during installation of new roof system. Foreman must have a minimum of five (5) years experience with the installation of system similar to that specified.

D. Successful contractor must obtain all components of roof system from a single manufacturer including any roll good materials if required. Any secondary products that are required which cannot be supplied by the specified manufacturer must be recommended and approved in writing by primary manufacturer prior to bidding.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

B. Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

1. Store materials above ground, on skids.

2. Protect material with waterproof covering and allow sufficient ventilation to prevent condensation buildup or moisture entrapment on the materials.

1.7 WARRANTY

A. Owner shall receive one (1) warranty from manufacturer of roof panels covering all of the following criteria. Multiple warranties are not acceptable.

1. Manufacturer's 30 year watertight warranty, including coverage for all trim, flashings, and penetrations associated with the standing seam roof area.

2. 20 year coverage on finish including checking, crazing, peeling, chalking, fading and/or adhesion.

3. Warranty shall commence on date of substantial completion or final payment, whichever is agreed by contract.

4. Installer shall provide manufacturer with 2 year warranty covering roofing system installation and watertightness.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Basis of Design Manufacturer: MBCI Metal Roof and Wall Systems, Division of NCI Group, Inc.; Houston TX. Tel: (877)713-6224; Email: info@mbci.com; Web: www.mbci.com.

2.2 PERFORMANCE REQUIREMENTS

A. General: Provide metal roof panel system meeting performance requirements as determined by application of specified tests by a qualified testing facility on manufacturer's standard assemblies.

B. Thermal Movements: Allow for thermal movements from variations in both ambient and internal temperatures. Accommodate movement of support structure caused by thermal expansion and contraction. Allow for deflection and design for thermal stresses caused by temperature differences from one side of the panel to the other.

2.3 METAL PANEL MATERIALS

A. Aluminum-Zinc Alloy-Coated Steel Sheet: ASTM A 792/A 792M, structural quality, pre-painted.

2.4 METAL ROOF PANELS

- A. Large Tapered-Rib-Profile, Exposed Fastener Metal Roof Panels: Structural metal roof panel consisting of formed metal sheet with trapezoidal major ribs with intermediate stiffening ribs symmetrically placed between major ribs, installed by lapping edges of adjacent panels.
 - 1. Basis of Design: MBCI, PBR Panel
 - 2. Coverage Width: 36 inches
 - 3. Major Rib Spacing: 12 inches on center.
 - 4. Rib Height: 1-1/4 inch.
 - 5. Exterior Finish: Signature 200
 - 6. Color: Bone White

2.5 METAL ROOF PANEL ACCESSORIES

- A. General: Provide complete metal roof panel assembly incorporating ridge, eave, rake, valley, and parapet trims, copings, fascias, gutters and downspouts, and miscellaneous flashings, in profiles as indicated. Provide required fasteners, closure strips, support plates, and sealants as indicated in manufacturer's written instructions.
- B. Flashing and Trim: Match material, thickness, and finish of metal panel face sheet.
- C. Panel Fasteners: Self-tapping screws and other acceptable fasteners recommended by roof panel manufacturer.
 - 1. Exposed Fasteners: Long life fasteners with EPDM or neoprene gaskets, with heads matching color of metal panels by means of factory-applied coating.
- D. Self-Adhering, Underlayment: Grace Ice & Water Shield
- E. Joint Sealers: Manufacturer's standard or recommended liquid and preformed sealers and tapes, and as follows:
 - 1. Tape Sealers: Manufacturer's standard non-curing butyl tape, AAMA 809.2.
 - 2. Concealed Joint Sealants: Non-curing butyl, AAMA 809.2.
 - 3. Exposed Joint Sealants: Urethane, single component, ASTM C 920.
- F. Roof Accessories: Approved by metal roof panel manufacturer.

2.6 FABRICATION

- A. General: Provide factory fabricated and finished metal panels and accessories meeting performance requirements, indicated profiles, and structural requirements.
- B. Panel Lengths: Form panels in continuous lengths for full length of detailed runs, except where otherwise indicated on approved shop drawings.
- C. Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's written instructions, approved shop drawings, and project drawings. Form from materials matching metal panel substrate and finish.

2.7 FINISHES

- A. Finishes, General: Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
- B. Modified Silicone-Polyester Two-Coat System: 0.20 – 0.25 mil primer with 0.7 – 0.8 mil color coat, meeting solar reflectance index requirements].
 - 1. Basis of Design: MBCI, Signature 200.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine metal panel system substrate and supports with Installer present. Inspect for erection tolerances and other conditions that would adversely affect installation of metal panel installation.
 - 1. Inspect metal panel support substrate to determine if support components are installed as indicated on approved shop drawings. Confirm presence of acceptable supports at recommended spacing to match installation requirements of metal panels.
 - 2. Panel Support Tolerances: Confirm that panel supports are within tolerances acceptable to metal panel system manufacturer but not greater than the following:
 - a. 1/4 inch in 20 foot in any direction.
 - b. 3/8 inch over any single roof plane.
- B. Correct out-of-tolerance work and other deficient conditions prior to proceeding with metal roof panel system installation.

3.2 PREPARATION

- A. Miscellaneous Supports: Install sub-framing, girts, furring, and other miscellaneous panel support members according to ASTM C 754 and manufacturer's written instructions.

3.3 METAL PANEL INSTALLATION

- A. Exposed Fastener Metal Roof Panels: Install weathertight metal panel system in accordance with manufacturer's written instructions, approved shop drawings, and project drawings. Install metal roof panels in orientation, sizes, and locations indicated, free of waves, warps, buckles, fastening stresses, and distortions. Anchor panels and other components securely in place. Provide for thermal and structural movement.
- B. Panel Sealants: Install manufacturer's recommended tape sealant at panel side-laps and endlaps.
- C. Panel Fastening: Attach panels to supports using screws, fasteners, and sealants recommended by manufacturer and indicated on approved shop drawings.
 - 1. Fasten metal panels to supports at each location indicated on approved shop drawings, with spacing and fasteners recommended by manufacturer.

2. Provide weatherproof jacks for pipe and conduit penetrating metal panels of types recommended by manufacturer.

3. Dissimilar Materials: Where elements of metal panel system will come into contact with dissimilar materials, treat faces and edges in contact with dissimilar materials as recommended by manufacturer.

3.4 ACCESSORY INSTALLATION

A. General: Install metal panel trim, flashing, and accessories using recommended fasteners and joint sealers, with positive anchorage to building, and with weather tight mounting. Coordinate installation with flashings and other components.

1. Install components required for a complete metal panel assembly, including trim, copings, flashings, sealants, closure strips, and similar items.

2. Comply with details of assemblies utilized to establish compliance with performance requirements and manufacturer's written installation instructions.

3. Set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently weather resistant.

B. Joint Sealers: Install joint sealers where indicated and where required for weathertight performance of metal panel assemblies, in accordance with manufacturer's written instructions.

3.6 CLEANING AND PROTECTION

A. Remove temporary protective films immediately in accordance with metal roof panel manufacturer's instructions. Clean finished surfaces as recommended by metal roof panel manufacturer.

B. Replace damaged panels and accessories that cannot be repaired to the satisfaction of the Architect.

End of Section