



This section includes magnesium oxide siding materials and trim for exterior wall finish.

This section includes performance, proprietary and descriptive type specifications; edit text to avoid conflicting requirements.

Part 1 General

1.1 SECTION INCLUDES

In this article, select the components or assemblies that are intended to be part of the content of this section and will not be included in other sections.

- .1 Exterior magnesium oxide lap siding for walls.
- .2 Exterior magnesium oxide [soffit] panels, [ventilated] [non-ventilated].
- .3 Trim materials.

1.2 RELATED SECTIONS

In this article, indicate those sections that inter-rely on this section. The listing below is only partial and should be edited to include those sections specific to the project that describe subjects or products that affect this section directly.

- .1 Section 05 41 00 - Structural Metal Lightweight Framing: Load bearing studs for exterior applications.
- .2 Section 06 11 00 - Wood Framing: Building wood framing assembly with openings for windows and doors.
- .3 Section 06 10 13 - Wood Blocking and Curbing: Wood blocking for support of [_____].
- .4 Section 07 27 00 - Air Barriers.
- .5 Section 09 91 10 - Painting.

1.3 REFERENCES

Edit this article after editing the rest of this section. Only list reference standards below, that are included within the text of this section, when edited for a project specification delete other references that do not apply.

- .1 International Code Council Evaluation Service Inc. (ICC-ES)
 - .1 Acceptance Criteria AC386 for Fiber-Reinforced Magnesium-Oxide-Based Sheets.
- .2 ASTM C1185-08(2012) - Standard Test Methods for Sampling and Testing Non-Asbestos Fiber-Cement Flat Sheet, Roofing and Siding Shingles, and Clapboards.
- .3 ASTM C1186-08(2012) - Standard Specification for Flat Fiber-Cement Sheets.
- .4 ASTM C1325-08b - Standard Specification for Non-Asbestos Fiber-Mat Reinforced Cementitious Backer Units.
- .5 ASTM E72-13a - Standard Test Methods of Conducting Strength Tests of Panels for Building Construction.

- .6 ASTM E84-13a - Standard Test Method for Surface Burning Characteristics of Building Materials.
- .7 ASTM E119-12a - Standard Test Methods for Fire Tests of Building Construction and Materials.
- .8 ASTM G21-13 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi.

1.4 SUBMITTALS FOR REVIEW

Do not request submittals if this specification section or drawings sufficiently describe the products of this section or if proprietary specifying is used. The following submittals are intended for review to determine eligibility for the project.

- .1 Section 01 33 00: Submission procedures.
- .2 Product Data: Provide product data on [magnesium oxide siding][soffits][trim] [metal framing].
- .3 Shop Drawings:
 - .1 Indicate special details associated with [lap and seal to window frame air barrier plane] [sealing penetrations].
 - .2 Indicate fastener type and spacing to suit framing details.

Use the following paragraph for submission of physical samples for selection of finish, colour, texture, etc.

- .4 Samples: Submit [two (2)] [_____] samples, [<300 x 300 mm><<12 x 12 inch>>] [<[_____] mm><<[_____] inch>>] in size illustrating surface texture and [_____].
- .5 Samples: Submit [two (2)] [_____] samples [<300 x 300 mm><<12 x 12 inch>>] [<[_____] mm><<[_____] inch>>] in size to Section [09 91 10] [_____] for [application of paint] [_____].

1.5 SUBMITTALS FOR INFORMATION

The following submittals are for information only; do not request these submittals if the information submitted will be assessed for acceptability.

- .1 Section 01 33 00: Submission procedures.
- .2 Installation Data: Manufacturer's special installation requirements.

Include the following ONLY if specifying for a LEED project. Specify only the technical requirements necessary to achieve the credits desired for this project.

- .3 Sustainable Design:
 - .1 Section 01 35 18: LEED documentation procedures.
 - .2 Provide required LEED documentation for Product [recycled content] [regional materials].
 - .3 Manufacturer's Certificate: Certify that Products meet or exceed [specified requirements].



1.6 CLOSEOUT SUBMITTALS

The following submittals are for project closeout purposes; do not request these submittals if the information submitted will be assessed for acceptability.

- .1 Section 01 78 10: Submission procedures.

Include the following ONLY if specifying for a LEED project.

- .2 Sustainable Design Closeout Documentation: [_____].

1.7 QUALITY ASSURANCE

This article includes statements that require quality applicable to the whole section.

- .1 Perform Work in accordance with manufacturer's written instructions and Technical Bulletin No's. 112809-1202 and 112809-1203.
- .2 Coordinate finishing of magnesium oxide components with Section 09 91 00 and manufacturer's Technical Bulletin No. 071509-1236.
- .3 Applicator Qualifications: Company specializing in performing the work of this section with minimum [three (3)] years documented experience [and approved by the manufacturer].

1.8 DELIVERY, STORAGE AND HANDLING

- .1 Section 01 61 00: Transport, handle, store, and protect products.
- .2 Protect materials from warping or other distortion by stacking in flat sheets, off the ground.
- .3 Protect stockpiled materials from weather using waterproof tarps.

1.9 WARRANTY

This article extends the warranty period beyond the one (1) year contract warranty period. Extended warranties add to construction cost and may present difficulties to the Owner by enforcing them. Specify with caution.

- .1 Section 01 78 10: Warranties.
- .2 Provide a [five (5)] [_____] year warranty to include coverage for failure to meet specified requirements.
- .3 Warranty: Include degradation of colour or deterioration of finish.

Part 2 Products

2.1 MANUFACTURERS

This article is for proprietary specifying with one or more manufacturers. Use the first and third paragraphs for specifying a single manufacturer. If specifying a product by reference to a standard only, delete this article. Additional manufacturer's data can be found at [http:// www.magnumbp.com](http://www.magnumbp.com).

- .1 Magnum Building Products, LLC
 - .1 10150 Highland Manor Drive, Suite 200

- .2 Tampa, Florida
 - .3 33610
 - .4 Tel: (813) 314-2202
 - .5 Fax: (813) 314-2203
 - .6 Web: www.magnumbp.com
- .2 Other acceptable manufacturers offering functionally [and aesthetically] equivalent products.
- .1 [____]; Product: [____].
 - .2 [____]; Product: [____].
 - .3 [____]; Product: [____].
- .3 Substitutions: [Not permitted] [Refer to Section 01 62 00].

2.2 MATERIALS

- .1 Magnesium Oxide Siding and Soffit Panels: Fibre-reinforced homogeneous panel, paperless, moisture resistant.

2.3 FRAMING MATERIALS

This article is to identify wood or metal framing substrates to which the sheathing is to be applied.

- .1 Metal Framing and Accessories: Specified in Section [09 22 13] [09 22 16] [05 41 00].
- .2 Wood Framing: Specified in Section [06 11 00] [06 10 13].

2.4 ACCESSORIES

- .1 Fastening: Corrosion resistant [self-tapping screws][pneumatic nails][adhesive] as recommended by manufacturer.
- .2 Air Barrier: [Spun bonded polyolefin sheeting] [Cellulose fibre building paper; water repellent breathing type] [CAN/CSA-A123.3] [ASTM D226], [No. 15 unperforated asphalt saturated felt] [sheet polyethylene, <0.25 mm><<10 mils>> thick] [____].
- .3 Flashing: Galvanized steel, [<0.4 mm thick><<28 gauge>>] [<0.5 mm thick><<26 gauge>>] [<[____] mm><<[____] gauge>>] thick.

2.5 FABRICATION - SIDING AND SOFFIT

- .1 Bevel Siding Size: [<[____] mm><<[____] inch>>] thick butt, [<[____] mm><<[____] inch>>] tip, [<190 mm><<7-1/2 inch>>][<215 mm><<8-1/2 inch>>] high board.
- .1 Surface Texture: [Sanded] [Smooth] [Woodgrain].
- .2 Soffit Panel: [<__ mm><<__ inch>>] thickness; [Perforated for ventilation][Non-ventilated].
- .1 Surface Texture: [Sanded] [Smooth] [Woodgrain].

2.6 FINISHES

The wide variety of colours available precludes a definitive listing in this article. Edit the following paragraphs to suit project requirements.

- .1 Site Finish Paint Finish: To Section 09 91 00, colour [_____] [as selected].

Part 3 Execution

3.1 EXAMINATION

- .1 Section 01 70 00: Verify existing conditions before starting work.
- .2 Verify that site conditions are ready to receive work and opening dimensions are as [instructed by the manufacturer] [indicated on shop drawings].
- .3 Verify that air barrier and building envelope transitions are ready to receive Work of this section.

3.2 INSTALLATION - SIDING

- .1 Install siding using [single] course method with [<[_____] mm><<[_____] inch>>] exposure.
- .2 Nail at [<300 mm><<12 inches>>] [<[_____] mm><<[_____] inches>>] on centre. Fasten siding in place level and plumb. [Blind nail except trim]. Nail to aligned pattern.
- .3 Mitre horizontal joints tight at 45 degrees. Mitre external and [mitre] [cope] internal corners.
- .4 Install siding for natural shed of water.
- .5 Position cut ends over bearing surfaces. Sand cut edges smooth and clean.
- .6 Install corner strips, closures, trim [and fascia].
- .7 Install metal flashings at [internal and external corners] [sills] [head of wall openings] [_____].

3.3 INSTALLATION - SOFFIT

- .1 Install in accordance with manufacturer's written instructions
- .2 Erect panels with edges butted tight and ends occurring over firm bearing.
- .3 Use screws when fastening to furring or framing.
- .4 Place panels perpendicular to supports, with staggered end joints over supports.

3.4 ERECTION TOLERANCES

Do not assume that there are industry standards for tolerances. Specify tolerances below as appropriate to the nature or character of the project. Verify that such tolerances are realistic and realizable.

- .1 Section 01 73 00: Tolerances.
- .2 Maximum Variation From [Plumb] [Level]: [<6 mm in 3 m><<1/4 inch in 10 ft>>] [<[_____] mm in 3 m><<[_____] inch in 10 ft>>].



- .3 Maximum Offset From Joint Alignment: [$<1.6\text{ mm}><1/16\text{ inch}>$] [$<[\text{_____}]$
 $\text{mm}><[\text{_____}] \text{ inch}>$].

3.5 PREPARATION FOR SITE FINISHING

Coordinate this article with finishing requirements indicated in Section 09 91 10. Edit the following paragraphs to suit.

- .1 Sand work smooth and set exposed nails [and screws].
.2 Site Finishing: Specified in Section 09 91 10.

END OF SECTION