



SECTION 07 46 00

SIDING

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Siding Panels
- B. Trim

1.2 RELATED SECTION

- A. Rough Carpentry; Framing and Wall Sheathing

1.3 REFERENCES

- A. ASTM D635-18: Standard Test Methods for Rate of Burning and/or Extent and Time of Burning of Plastics in Horizontal Position.
- B. ASTM E84-18: Standard Test Method for Surface Burning Characteristics of Building Materials.
- C. ASTM E119-19 Standard Test Method for Fire Tests of Building Construction and Materials.
- D. NFPA 268: Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source.
- E. ASTM D1929-16: Standard Test Method for Determining Ignition Temperature of Plastics.
- F. ASTM D696-16: Standard Test Method for Coefficient of Linear Dimension Changes of Plastics.
- G. ASTM D4226-16: Standard Test Methods for Impact Resistance of Rigid Poly(Vinyl Chloride) (PVC) Building Products.
- H. ASTM D3679-17 Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Siding.
- I. ASTM C1363-11: Standard Test Method for Thermal Performance of Building Material and Envelope Assemblies by Means of a Hot Box Apparatus.
- J. ASTM G-155-13: Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials.
- K. ASTM D5206-13: Standard Test Methods for Wind load Resistance.

- L. ASTM D3345-17: Standard Test Method for Laboratory Evaluation of Solid Wood for Resistance to Termites.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00.
- B. Manufacturer's installation instructions.
- C. Regulatory Requirements:
 - 1. Intertek Code Compliance Research Report #0316
 - 2. ICC-ES Evaluation Report- ESR 4449
 - 3. Florida Product Approval #31747

1.5 QUALITY ASSURANCE

- A. Manufacturer: Maintain rigorous production quality control standards to ensure that siding will perform as expected for its intended use.
- B. Regulatory Requirements:
 - 1. Intertek Code Compliance Research Report #0316
 - 2. ICC-ES Evaluation Report- ESR 4449
 - 3. Florida Product Approval #31747

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Refer to manufacturer's installation instructions for storage and handling.

1.7 WARRANTY

- A. Upon completion, provide a written transferable, lifetime limited warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Associated Materials Incorporated, located at 3773 State Road, Cuyahoga Falls, OH 44223; Toll Free Tel: 800-922-6009.
- B. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.

2.2 MATERIALS

- A. General: ASCEND composite siding is produced from glass fiber reinforced polymer and graphite infused polystyrene foam.
- B. Fire Properties:
 - a. Average Time of Burning: No self-sustained burn, Pass when tested in accordance with ASTM D 635-18.
 - b. Average Extent of Burning: No self-sustained burn, Pass when tested in accordance with ASTM D 635-18.
 - c. Flame Spread Index: Less than or equal to 25, when tested in accordance with ASTM E 84-18b.
 - d. Smoke Developed Index: Less than or equal to 450, when tested in accordance with ASTM E 84-18b.
 - e. ASCEND may be used in ASTM E119 fire resistance rated assemblies.
 - f. ASCEND approved for use as specified in section 1406 of the

- International Building Code as tested to NFPA 268.
- g. Ignition Temperature: When tested in accordance with ASTM D 1929, no self-ignition, and no flaming; no smoldering at less than 770 degrees F (410 degrees C).

C. Typical ASCEND Siding Properties:

- a. Camber: < 1/8" per ASTM D 3679.
- b. Heat Shrinkage: 0.2 % per ASTM D 3679.
- c. Impact Resistance: > 35-inch lbs. per ASTM D 4226, Procedure A
- d. Weatherability: No surface or structural defects such as peeling, cracking, or chipping when tested per ASTM G 155-13
- e. Color: Spectrophotometer controlled, exceeding ASTM requirement of DE 1.5.
- f. Coefficient of Linear Expansion: 2.3 by 10-5 in/in F, per ASTM D 696.
- g. Gloss: Garner Gloss meter controlled.
- h. Surface Distortion: Exceeds 165 degrees F (40.5 degrees C), per ASTM D 3679.
- i. Wind Resistance: per ASTM D 5206-13. Exposure B, 30 ft. mean roof height, Safety Factor 1.5, PEF .5.
- j. Termite Resistance: Conclusion that ASCEND met the conditions for complete resistance to the termite attack when tested to ASTM D3345.
- k. Interlock: Post-form style Stack-lock with positive interlock; both ends of panel's factory cut and notched for overlap.

2.3 SIDING

A. Horizontal Siding: ASCEND 7 inch (178 mm) Clapboard

- 1. Panel Thickness: 3/4 inch (19.05 mm)
- 2. Panel Projection: 3/4 inch (19.05 mm)
- 3. Panel Length: 12 feet 3 inches (3.84 m)
- 4. Exposure: 7 inch (178 mm)
- 5. Finish: Low Gloss, Cedar grain
- 6. Interlock: Stacklock
- 7. R Value: 2.0 per ASTM C 1363-11
- 8. Wind load design pressure: 53 psf. (180 mph ultimate)
- 9. Nail Slots: 1/4-inch (6.35 mm) spaced approximately 3/8 inch (9.52 mm) apart.
- 10. Color: As selected by Architect from manufacturer's standard colors.
- 11. Color shall be as follows:
 - a) Ageless Slate
 - b) Almond
 - c) Canyon Drift
 - d) Cape Cod Gray
 - e) Cast Iron
 - f) Charcoal Smoke
 - g) Deep Moss
 - h) Fired Brick
 - i) Flagship Brown
 - j) Glacier White
 - k) Harbor Blue
 - l) Laguna Blue
 - m) Midnight Blue
 - n) Monterey Sand
 - o) Mountain Fern
 - p) Pebble
 - q) Riviera Dusk
 - r) Rustic Timber

- s) Sterling Gray
 - t) Storm
- B. Vertical Siding: ASCEND 12" (304.8 mm) Board & Batten
1. Thickness: 3/4 inch (19.05 mm)
 2. Projection: 3/4 inch (19.05 mm)
 3. Length: 12 feet (3.66 m)
 4. Exposure: (304.8 mm)
 5. Finish: Low Gloss, Wood grain or Matte
 6. Nail Slots: 1 inch (25 mm) spaced approximately 1/2 inch (6 mm) apart.
 7. R Value: 1.7 per ASTM C 1363-11
 8. Wind load design pressure: 52 psf (12" nails O.C.) 65.3 psf (8" nails O.C.) 66.4 psf (12" OC Staples) 120.9 psf (8" OC Staples)
 9. Color: As selected by Architect from manufacturer's standard colors.
 10. Color shall be as follows:
 - a) Ageless Slate
 - b) Almond
 - c) Canyon Drift
 - d) Cape Cod Gray
 - e) Cast Iron
 - f) Charcoal Smoke
 - g) Deep Moss
 - h) Fired Brick
 - i) Flagship Brown
 - j) Glacier White
 - k) Harbor Blue
 - l) Laguna Blue
 - m) Midnight Blue
 - n) Monterey Sand
 - o) Mountain Fern
 - p) Pebble
 - q) Riviera Dusk
 - r) Rustic Timber
 - s) Sterling Gray
 - t) Storm

2.4 TRIM

- A. ASCEND H Trim
1. Width: 5.5 inch (139.7 mm)
 2. Length: 16 feet (4.88 m)
 3. Thickness: 0.060 inch (1.52 mm)
 4. Finish: Matte
 5. Color: As selected by Architect from manufacturer's standard colors.
 6. Color shall be as follows:
 - a) Ageless Slate
 - b) Almond
 - c) Canyon Drift
 - d) Cape Cod Gray
 - e) Cast Iron
 - f) Charcoal Smoke
 - g) Deep Moss
 - h) Fired Brick
 - i) Flagship Brown
 - j) Glacier White
 - k) Harbor Blue
 - l) Laguna Blue

- m) Midnight Blue
- n) Monterey Sand
- o) Mountain Fern
- p) Pebble
- q) Riviera Dusk
- r) Rustic Timber
- s) Sterling Gray
- t) Storm

PART 3 EXECUTION

3.1 EXAMINATION

- A. Confirm that all critical dimensions are as specified on the drawings.
- B. Beginning installation indicates Installer's acceptance of substrate as suitable to accept siding.

3.2 PREPARATION

- A. Repair substrate flaws or defects before applying siding or soffits.
- B. Where necessary, fur surfaces to an even plane and free from obstructions before application.

3.3 INSTALLATION

- A. Install siding in accordance with manufacturer's installation instructions.
- B. Install siding and accessories in accordance with best practice, with all joint members plumb and true.

3.4 FIELD QUALITY CONTROL

- A. After installation of siding, check entire surface for obvious flaws or defects.
- B. Replace and repair any problem areas, paying close attention to the substrate for causes of the problem.

3.5 CLEANING

- A. After application of siding, clean as necessary to remove all fingerprints and soiled areas.
- B. Upon completion of siding application, clean entire area, removing all scrap, packaging, and unused materials related to this work.

END OF SECTION