PART 1 GENERAL

1.1 Section Includes

A. Siding panels.

B. Soffit panels.

C. Accessories and trim.

1.2 Related Sections

A. Section 06100 - Rough Carpentry: Framing and Sheathing.

B. Section 07900 - Joint Sealers.

C. Section 09900 - Paints and Coatings: Field painting.

1.3 References

A. ASTM C 920 - Standard Specification for Elastomeric Joint Sealants; 1998.

B. ASTM C 1185 - Standard Test Methods for Sampling and Testing Non Asbestos Fiber-Cement Flat Sheet, Roofing and Siding Shingles, and Clapboards; 1999.

C. ASTM C 1186 - Standard Specification for Flat Non-Asbestos Fiber Cement Sheets; 1999.

D. ASTM E 72 - Standard Test Methods of Conducting Strength Tests of Panels for Building Construction; 1998.

E. ASTM E 84 -- Standard Test Method for Surface Burning Characteristics of Building Materials; 1999.

F. ASTM E 96 - Standard Test Methods for Water Vapor Transmission of Materials; 1995.

G. ASTM E 136 - Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C; 1999.

H. ASTM E 228 - Standard Test Method for Linear Thermal Expansion of Solid Materials with a Vitreous Silica Dilatometer; 1995.

I. ASTM G 26 - Standard Practice for Operating Light-Exposure Apparatus (Xenon-Arc Type) With and Without Water for Exposure of Nonmetallic Materials; 1996.

J. ASTM E 330-97 – Structural Performance of exterior windows, curtain walls and doors by uniform static air pressure difference.

1.4 Submittals

A. Make submittals under provisions of Section 01300.

B. Product Data: Manufacturer's data sheets on each product to be used, including:

   1. Preparation instructions and recommendations.

   2. Storage and handling requirements and recommendations.

3. Installation methods, including nailing patterns.

4. Applicable model code authority evaluation report (ICC, CCMC, etc.)

1.5 Quality Assurance

A. Installer Qualifications: Provide installer with not less than three years of experience with products similar to those specified.

1.6 Delivery, Storage, and Handling

A. Store products off the ground, on a flat surface, and under a roof or separate waterproof covering.

1.7 WARRANTY

A. Provide Allura 50 year limited siding warranty.

B. Allura ColorMax Finish – provide 15 year limited paint warranty

C. Register manufacturer's warranty, made out in Owner's name, with copy to Owner.

PART 2 PRODUCTS

2.1 Manufacturer

A. Allura of Plycem, 15055 Woodham Drive Houston, Texas 77073

   main: (844) 4 ALLURA or (844) 425-5872 email: info@elementia.com www.alluraUSA.com

B. Substitutions: Not permitted.

C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 Panels

A. Fiber Cement Board Panels - General: Allura Fiber Cement Board Panels consist of cement, recycled content and cellulose fiber formed under high pressure into boards with integral surface texture; complying with ASTM C 1186 Type A Grade II; machined edges; for nail attachment.

   1. Surface Burning Characteristics: Flame spread index of 0, smoke developed index of 5, maximum; when tested in accordance with ASTM E 84 (Class I/A).

   2. Flammability: Noncombustible, when tested in accordance with ASTM E 136.

   3. Flexural Strength: At least 1450 psi (10 MPa) when in equilibrium condition, and at least 1015 psi (7 MPa) when in wet condition, tested in accordance with ASTM C 1185.

   4. Coefficient of Thermal Expansion: Less than 1×10^{-5}/inch/inch/degree F (0.5×10^{-5}/degree C), when tested in accordance with ASTM E 228.

5. Freeze Thaw Resistance: At least 80 percent flexural strength retained, when tested in accordance with ASTM C 1185.

6. UV Resistance: No cracking, checking, or erosion, when tested for 2000 hours in accordance with ASTM G 26.

7. Water Tightness: No water droplets on underside, when tested in accordance with ASTM C 1185.

B. Horizontal Siding: Allura Lap Siding.

1. Thickness: 5/16 inch (7.9 mm), plus or minus .04 inch (1 mm).

2. Length: 12 feet (3657 mm), plus 0, minus 1/8 inch (3 mm).

3. Style: Smooth lap siding.

    a. Width: 5-1/4 inches (133 mm) wide.

    b. Width: 6-1/4 inches (159 mm) wide.

    c. Width: 7-1/4 inches (185 mm) wide.

    d. Width: 8-1/4 inches (210 mm) wide.

    e. Width: 9-1/4 inches (235 mm) wide.

    f. Width: 12 inches (305 mm) wide.

4. Sealant/Primer: Our Primary Sealant/Primer.

5. Field Finish Paint: 100 percent acrylic latex as specified in Section 09900.

6. Factory Finish: Factory applied ColorMax Finishing System by Allura with 100 percent acrylic solid color as follows:

a. Snow.	g. Savannah Wicker.	m. Suede.	s. Pacific Blue.
b. Linen.	h. Natural Clay.	n. Coastal Blue.	t. Forest.
c. Sterling Gray.	i. Taupe.	o. Autumn Red.	u. Granite Gray.
d. Desert Tan.	j. Nantucket Gray.	p. Sable Brown.	v. Hearthstone.
e. Marigold.	k. Olive.	q. Cypress.	
f. Light Maple.	l. Pewter.	r. Flagstone.	

7. Style: Cedar lap siding.

    a. Width: 5-1/4 inches (133 mm) wide.

    b. Width: 6-1/4 inches (159 mm) wide.

    c. Width: 7-1/4 inches (185 mm) wide.

    d. Width: 8-1/4 inches (210 mm) wide.

    e. Width: 9-1/4 inches (235 mm) wide.

    f. Width: 12 inches (305 mm) wide.

8. Sealant/Primer: Our primary Sealant/Primer.

9. Field Finish Paint: 100 percent acrylic latex as specified in Section 09900.

10. Factory Finish: Factory applied ColorMax Finishing System by Allura with 100 percent acrylic solid color as follows:

a. Snow.	g. Savannah Wicker.	m. Suede.	s. Pacific Blue.
b. Linen.	h. Natural Clay.	n. Coastal Blue.	t. Forest.
c. Sterling Gray.	i. Taupe.	o. Autumn Red.	u. Granite Gray.
d. Desert Tan.	j. Nantucket Gray.	p. Sable Brown.	v. Hearthstone.
e. Marigold.	k. Olive.	q. Cypress.	
f. Light Maple.	l. Pewter.	r. Flagstone.	

11. Factory Stain Finish: Factory applied Allura Fiber Cement Siding Premium Stain color as follows:

    a. Redwood.

    b. Mahogany.

    c. Maple.

    d. Cedar.

    e. Emerald.

    f. Slate.

C. Simulated Shingle Siding: Allura Shakes.

1. **Thickness**: 7/16 inch (11.1 mm), plus or minus .04 inch (1 mm).

2. **Style:** Perfection shingle, grooved, 7 inches (178 mm) exposure, 8-1/4 inches (210 mm) wide by 12 feet (3657 mm), plus 0, minus 1/8 inch (3 mm).

3. **Style:** Random square straight edge, cut between shingles, 5 inches (127 mm) exposure, 12 inches (305 mm) wide by 48 inches (1219 mm) long.

4. **Style:** Random square straight edge, cut between shingles, 7 inches (178 mm) exposure, 16 inches (406 mm) wide by 48 inches (1219 mm) long.

5. **Style:** Random square staggered edge, cut between shingles, 7 inches (178 mm) exposure, 16 inches (406 mm) wide by 48 inches (1219 mm) long.

6. **Style:** Half-rounds full cut between shingles, 7 inches (178 mm) exposure, 16 inches (406 mm) wide by 48 inches (1219 mm) long.

7. **Style:** Octagons full cut between shingles, 7 inches (178 mm) exposure, 16 inches (406 mm) wide by 48 inches (1219 mm) long.

8. **Sealant/Primer:** Our primary Sealant/Primer.

9. **Field Finish Paint:** 100 percent acrylic latex as specified in Section 09900.

10. **Factory Finish:** Factory applied ColorMax Finishing System by Allura with 100 percent acrylic solid color as follows:

a. Snow.	g. Savannah Wicker.	m. Suede.	s. Pacific Blue.
b. Linen.	h. Natural Clay.	n. Coastal Blue.	t. Forest.
c. Sterling Gray.	i. Taupe.	o. Autumn Red.	u. Granite Gray.
d. Desert Tan.	j. Nantucket Gray.	p. Sable Brown.	v. Hearthstone.
e. Marigold.	k. Olive.	q. Cypress.	
f. Light Maple.	l. Pewter.	r. Flagstone.	

11. Factory Stain Finish: Factory applied Allura Fiber Cement Siding Premium Stain color as follows:

    a. Redwood.

    b. Mahogany.

    c. Maple.

    d. Cedar.

    e. Emerald.

    f. Slate.

12. Simulated Shingle Siding: Allura Shakes.

13. Thickness: ¼ inch (6.4 mm) plus or minus .031 inch (.8mm)

14. Style: Individual Shakes, 8" reveal with 18" length. Package comes with all 3 widths to apply in a straight or staggered appearance:

    a. Width: 6 ¼"

    b. Width: 8 ¼

    c. Width: 12"

15. Sealant/Primer: Our primary Sealant/Primer.

16. Field Finish Paint: 100 percent acrylic latex as specified in Section 09900.

D. Vertical Siding: Allura Vertical Siding.

1. Thickness: 5/16 inch (7.9 mm), plus or minus .04 inch (1 mm).

2. Size: 48 by 96 inches (1220 by 2440 mm). 3. Size: 48 by 108 inches (1220 by 2743 mm). 4. Size: 48 by 120 inches (1220 by 3048 mm).

5. Style: Smooth panel.

6. Style: Stucco texture panel.

7. Style: Cedar panel, no grooves.

8. Style: Cedar panel, 3/8 inch (9.5 mm) wide grooves at 8 inches (200 mm) on center.

9. Style: ShipLap panel 3/8 inch (9.5 mm) wide grooves at 8 inches (200 mm) on center.

10. Sealant/Primer: Our primary Sealant/Primer.

11. Field Finish Paint: 100 percent acrylic latex as specified in Section 09900.

12. Factory Finish: Factory applied ColorMax Finishing System by Allura with 100 percent acrylic solid color as follows:

a. Snow.	g. Savannah Wicker.	m. Suede.	s. Pacific Blue.
b. Linen.	h. Natural Clay.	n. Coastal Blue.	t. Forest.
c. Sterling Gray.	i. Taupe.	o. Autumn Red.	u. Granite Gray.
d. Desert Tan.	j. Nantucket Gray.	p. Sable Brown.	v. Hearthstone.
e. Marigold.	k. Olive.	q. Cypress.	
f. Light Maple.	l. Pewter.	r. Flagstone.	

E. Soffit: Allura Soffit, ventilated and non-ventilated.

1. Thickness: 1/4 inch (6.35 mm), plus or minus 1/32 inch (0.8 mm).

2. Length: 12 feet (3657 mm), plus 0, minus 1/8 inch (3 mm).

3. Style: Smooth texture

    a. Width: 12 inches (305 mm) wide.

    b. Width: 16 inches (406 mm) wide.

    c. Width: 24 inches (610 mm) wide.

4. Style: Cedar texture

    a. Width: 12 inches (305 mm) wide.

    b. Width: 16 inches (406 mm) wide.

    c. Width: 24 inches (610 mm) wide.

5. Ventilated soffit.

6. Non-ventilated soffit.

7. Combination of Ventilated and Non-ventilated as indicated on the Drawings.

8. Sealant/Primer: Our primary Sealant/Primer.

9. Field Finish Paint: 100 percent acrylic latex as specified in Section 09900.

10. Factory Finish: Factory applied ColorMax Finishing System by Allura with 100 percent acrylic solid color as follows:

a. Snow.	g. Savannah Wicker.	m. Suede.	s. Pacific Blue.
b. Linen.	h. Natural Clay.	n. Coastal Blue.	t. Forest.
c. Sterling Gray.	i. Taupe.	o. Autumn Red.	u. Granite Gray.
d. Desert Tan.	j. Nantucket Gray.	p. Sable Brown.	v. Hearthstone.
e. Marigold.	k. Olive.	q. Cypress.	
f. Light Maple.	l. Pewter.	r. Flagstone.	

11. Factory Stain Finish: Factory applied Allura Fiber Cement Siding Premium Stain color as follows:
   a. Redwood.
   b. Mahogany.
   c. Maple.
   d. Cedar.
   e. Emerald.
   f. Slate.

F. Soffit Panel: Allura Fiber Cement Soffit Panel.
   1. Thickness: 1/4 inch (6 mm), (6.35 mm, plus or minus 0.8 mm).
   2. Width: 48 inches (1220 mm).
   3. Length: 8 feet (2440 mm), plus 0, minus 1/8 inch (3.17 mm).
   4. Style: Smooth texture
   5. Style: Cedar texture
   6. Sealant/Primer: Sealant/Primer.
   7. Field Finish Paint: 100 percent acrylic latex as specified in Section 09900.

2.3 Accessories

A. Trim: Allura Trim/Fascia Board
   1. Size:
       a. Thickness: 7/16 inch (11 mm) plus or minus (1 mm).
           1) Width:
               i. 3-1/2 inch (89 mm).
               ii. 5-1/2 inch (140 mm).
               iii. 7-1/4 inch (185 mm).
               iv. 9-1/4 inch (235 mm). x.
               11-1/4 inch (286 mm).
           2) Length: 12 feet (3.657 m) plus or minus 1/8 inch (3.17 mm).
       b. Thickness: 4/4''.
           1) Width:
               i. 2" (59 mm).
               ii. 3" (76 mm).
               iii. 4" (102 mm).
               iv. 6" (153 mm).

         x. 8" (203 mm).

         xi. 10" (254 mm).

         xii. 12" (305 mm).

      2) Length: 12 feet (3.657 m) plus or minus 1/8 inch (3.17 mm).

    c. Thickness: 5/4" .

      1) Width:

        i. 3" (76 mm).

        ii. 4" (102 mm).

        iii.5" (127 mm).

        iv. 6" (153 mm).

        x. 8" (203 mm).

        xi. 10" (254 mm).

        xii. 12" (305 mm).

      2) Length: 12 feet (3.657 m) plus or minus 1/8 inch (3.17 mm).

  2. Sealant/Primer: Our primary Sealant/Primer.

B. Provide the following trim:

  1. Starter strip for lap siding.

  2. Outside corners, butted to siding.

  3. Outside corners, overlapping siding.

  4. Fascia board.

C. Sealant: Paintable, 100 percent acrylic latex caulk complying with ASTM C 920.

D. Sheet Metal Flashing: Minimum 26 gauge hot-dipped galvanized steel sheet, or
   coated aluminum.

E. Nails: Length as required to penetrate minimum 1-1/4 inch (32mm) into solid
   backing; hot-dipped galvanized or stainless steel.

F. Building Paper: Kraft or bituminous paper; not polyethylene or foil.

G. Field Finish Paint: 100 percent acrylic latex as specified in Section 09900.

PART 3 EXECUTION

3.1 Examination

A. Prior to commencing installation, verify governing dimensions of building and
condition of substrate.

B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory
preparation before proceeding.

3.2 Preparation

A. Examine, clean, and repair as necessary any substrate conditions that would be
detrimental to proper installation.

B. Do not begin installation until unacceptable conditions have been corrected.

3.3 Installation

A. Install in accordance with manufacturer's instructions and Drawing details.

  1. Read warranty and comply with all terms necessary to maintain warranty coverage.

  2. Install in accordance with conditions stated in model code evaluation report applicable to location of project.

  3. Use trim details indicated on drawings.

  4. Touch up all field cut edges before installing.

  5. Pre-drill nail holes if necessary to prevent breakage.

B. Over Wood Studs Without Sheathing: Install building paper over studs prior to installing siding.

C. Over Wood and Wood-Composite Sheathing: Fasten siding through sheathing into studs.

D. Over Foam Sheathing: Read and comply with sheathing manufacturer's recommendations.

  1. For sheathing of 1 inch (25 mm) thickness or less, nail through sheathing into studs using correspondingly longer nails.

E. Over Masonry Walls: Install furring strips of adequate thickness to accept full length of nails and spaced at 16 inches (406 mm) on center.

F. Over Steel Studs: Minimum 20 gauge steel, 3 5/8" (92 mm) C-studs. Use 1-5/8" (41 mm) long, #8-18 x 3/8" HD self-tapping, corrosion-resistant ribbed bugle head screws. Attach siding at each stud insuring that at least 3 screw threads penetrate the studs.

G. Diagonal Siding: Follow manufacturer's instructions.

H. Allow space between both ends of siding panels that butt against trim for thermal movement; seal joint between panel and trim with exterior grade sealant.

I. Joints in Horizontal Siding: Avoid joints in lap siding except at corners; where joints are inevitable stagger joints between successive courses.

J. Joints in Vertical Siding: Install Z-flashing in horizontal joints between successive courses of vertical siding.

K. Furred Installation: Leave space at top and bottom open; top may be behind soffit; at bottom install insect screen overopening by wrapping a strip of screen over bottom ends of vertical furring strips.

L. Install sheet metal flashing above door and window casings and horizontal trim in field of siding.

M. Do not install siding less than 6 inches (150 mm) from surface of ground nor closer than 1 inch (25 mm) to roofs, patios, porches, and other surfaces where water may collect.

N. After installation, seal all joints except lap joints of lap siding. Seal around all penetrations. Paint all exposed cut edges.

O. Finish Painting: Specified in Section 09900.

P. Finish Painting: Within 6 months after installation, paint siding and trim with one coat finish paint.

Q. Finish Painting: Within 6 months after installation, paint siding and trim with one coat primer and two coats finish paint.

3.4 Cleaning

A. At completion of work, remove debris caused by siding installation from project site.

B. Touch-up, repair or replace damaged products before Substantial Completion. END

OF SECTION