



SECTION 07 21 13

CONTINUOUS INSULATION XCI FOIL (CLASS A) WALL PANELS

This specification is based on the exterior continuous insulation products of Hunter Panels, located at:

15 Franklin Street  
Portland, Maine 04101  
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As an industry leader in Polyiso insulation for over 20 years Hunter Xci products are designed for use in commercial wall applications to provide “ci” continuous insulation within the building envelope.

This specification includes Xci Foil (Class A); high thermal resistive rigid insulation panels composed of an ASTM E 84 Class A rigid polyisocyanurate foam core bonded on-line during the manufacturing process to a reflective, glass fiber reinforced foil facing material on both sides. Both are the same material and either side may face the exterior of the wall. Xci Foil (Class A) is designed for use as exterior continuous insulation in a wall assembly.

Follow the instructions listed in the **SPECIFIER INSTRUCTIONS** included throughout the specification. Edit carefully to suit project requirements. Modify as necessary and delete paragraphs that are not applicable.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Continuous Insulation Xci Foil (Class A).

1.2 RELATED SECTIONS

- A. Section 03300 - Cast In Place Concrete: Concrete base wall.
- B. Section 03400 - Pre-Cast Concrete: Pre-cast concrete base wall.
- C. Section 04210 - Clay Masonry: Brick facing.
- D. Section 04800 - Masonry Assemblies: Masonry base wall.

- E. Section 04850 - Stone Facing.
- F. Section 05400 - Cold Formed Metal Framing.
- G. Section 07260 - Vapor Retarders: Vapor retarder materials over insulation to adjacent insulation.
- H. Section 07270 - Air Barriers: Air seal materials over insulation to adjacent insulation.
- I. Section 09110 - Non-Structural Metal Framing.
- J. Section 09200 - Plaster and Gypsum Board.
- K. Section 09220 - Stucco.

### 1.3 REFERENCES

- A. ASTM C 209 – Methods of Testing Insulating Board, Structural and Decorative.
- B. ASTM C 518 – Steady State Thermal Transmission by Means of the Heat Flow Meter Apparatus (R Value)
- C. ASTM C 1289 – Specifications for Faced Rigid Cellular Polyisocyanurate Thermal Insulating Board.
- D. ASTM D 1037 - Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panel Materials
- E. ASTM D 1621 - Test Methods for Compressive Properties of Rigid Cellular Plastics.
- F. ASTM D 2126 - Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging.
- G. ASTM D 3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
- H. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials
- I. ASTM E 96 - Test Method for Water Vapor Transmission of Materials.
- J. ASTM E 283 – Standard Test Method for Determining Rate of Air Leakage Through Exterior Window, Curtain Walls and Doors Under Specific Pressure Differences Across the Specimen
- K. ASTM E 330 – Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
- L. ASTM E 331 – Standard Test Method for Water Penetration of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference
- M. ASTM E 2178 – Standard Test Method for Air Permeance of Building Materials
- N. ASTM E 2357 – Standard Test Method for Determining Air Leakage of Air Barrier Assemblies
- O. ASHRAE 90.1-2010 - Energy Standard for Buildings Except Low-Rise Residential Buildings.

- P. California Bureau of Furnishings and Home Insulation
- Q. IBC Chapter 26 – Foam Plastic Insulation.
- R. Miami-Dade County FL NOA No: 14-0501.01.
- S. NFPA 285 - Standard Fire Test Method For Evaluation Of Fire Propagation Characteristics Of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components.

#### 1.4 SYSTEM DESCRIPTION

**SPECIFIER INSTRUCTIONS** - Delete sections below not relevant to this project; add others as required.

- A. NFPA 285 Exterior Wall Assembly – Concrete Masonry Construction:
  - 1. Base Wall System:
    - a. Cast in Place Concrete Masonry
    - b. Precast Concrete Masonry
    - c. CMU Wall.
  - 2. Approved Exterior Finish:
    - a. Masonry: Brick veneer anchors, standard types, installed maximum 24 inches (610 mm) o.c. vertically. Maximum 2 inch (51 mm) air gap between exterior insulation and brick. Standard nominal 4 inches (102 mm) thick or greater, clay brick.
    - b. Stucco: Minimum 1/2 inch (13 mm) thick, Exterior Cement Plaster and Lath.
    - c. Limestone or Natural Stone: Minimum 1-1/4 inch (32 mm) thick, Limestone or Natural Stone Veneer or minimum 1-1/2 inches (38 mm) thick Cast Artificial Stone Veneer. Any standard installation technique can be used.
    - d. Terra Cotta Cladding: Use any Terra Cotta Cladding System in which Terra Cotta is minimum 1/2 inch (13 mm). Any standard installation technique can be used.
    - e. Thin Brick or Cultured Stone: Use any metal lath and thin set adhesive tested by the panel manufacturer via the NFPA 285 test method. Minimum of 3/4 inch (18 mm). Any standard installation technique can be used.
    - f. Metal Composite Material: Use any Metal Composite Material system that has been successfully tested by the panel manufacturer via the NFPA 285 test method. Any standard installation technique can be used.
    - g. Exterior Metal: Metal Exterior wall coverings: Steel, Aluminum, Copper or Zinc. Any standard installation technique can be used.
    - h. Fiber Cement Board siding. Any standard installation technique can be used.
    - i. Stone Aluminum: Stone Aluminum Honeycomb Composite Panels that have been successfully tested by the panel manufacturer via the NFPA 285 test method. Any standard installation technique can be used.
    - j. Autoclaved-aerated-concrete (AAC) panels that have been successfully tested by the panel manufacturer via the NFPA 285 test method. Any standard installation technique can be used.
    - k. FunderMax M.Look Grey Core- minimum 1/4" thick using any standard installation technique.
  - 3. Panel Thickness:
    - a. 3.5 inches (89 mm) maximum, NFPA 285 approved.
    - b. 3.6 to 4.0 inches (91 to 102 mm), contact Hunter Panels Xci for NFPA 285 approvals.
  - 4. Stud Cavity: Not Applicable.
  - 5. Exterior Sheathing: Not Applicable.
  - 6. Floorline Firestopping: 4 lb/cu ft mineral fiber based safing insulation at each floor line, attached with Z Clips or equivalent.
  - 7. Weather Resistive Membrane Applied to Base Wall: Acceptable products are:

- a. Carlisle:
  - 1) Fire Resist Barritech VP or VP LT
  - 2) Fire Resist Barritech NP
  - 3) Fire Resist 705 FR-A
  - 4) Fire Resist 705 VP
- b. BASF:
  - 1) Enershield I
  - 2) Enershield HP
- c. Cosella Dorken
  - 1) Delta-Vent SA
  - 2) Delta-Vent S
  - 3) Delta-Fassade S
  - 4) Delta Maxx
- d. Dryvit:
  - 1) Backstop NT
- e. DuPont:
  - 1) Tyvec ComercialWrap or Commercial Wrap D
- f. GE:
  - 1) Momentive SEC 2500 SilShield
  - 2) Momentive SEC 2600 Elemax
- g. Henry:
  - 1) Air Bloc 16MR
  - 2) Air Bloc 17MR
  - 3) Air Bloc 21S
  - 4) Air Bloc 31MR
  - 5) Air Bloc 33MR
  - 6) Blueskin SA (Please contact Hunter Xci for cladding options)
- h. PolyGuard:
  - 1) Air Lok Flex VP
  - 2) Flexguard
  - 3) Air Lok Flex (Please contact Hunter Xci for cladding options)
- i. Prosoco:
  - 1) R Guard Spray Wrap MVP
  - 2) R Guard CAT-5
  - 3) R Guard CAT-5 Rainscreen
  - 4) R Guard VB
- j. StoCorp:
  - 1) StoGuard VaporSeal
- k. VaproShield:
  - 1) Wrap Shield SA
  - 2) Reveal Shield SA
- l. WR Grace:
  - 1) Perm-a-barrier VPS
  - 2) Perm-a-barrier NPL
  - 3) Perm-a-barrier VPL or VPL LT
  - 4) Perm-a-barrier VPL 50 (Please contact Hunter Xci for cladding options)
  - 5) Perm-a-barrier NP 10 (Please contact Hunter Xci for cladding options)
  - 6) Perm-a-barrier NP 20
  - 7) Perm-a-barrier Aluminum Wall Membrane
- m. WR Meadows
  - 1) Air Shield LMP (Gray or Black)
  - 2) Air Shield TMP
  - 3) Air Shield LSR
- n. 3M:
  - 1) 3015 (with Hold Fast adhesive at a 6 mil thickness)
- o. Pecora

- 1) XL Perm Ultra VP
- p. None
- 8. Weather Resistive Membrane Applied to Exterior Insulation: Acceptable products are:
  - a. Carlisle:
    - 1) Fire Resist Barritech VP or VP LT
    - 2) Fire Resist Barritech NP
    - 3) Fire Resist 705 FR-A
    - 4) Fire Resist 705 VP
  - b. Cosella Dorken
    - 1) Delta-Vent SA
    - 2) Delta-Vent S
    - 3) Delta-Fassade S
    - 4) Delta Maxx
  - c. Dryvit:
    - 1) Backstop NT
  - d. DuPont:
    - 1) Tyvec ComercialWrap
  - e. GE:
    - 1) Momentive SEC 2500 SilShield
    - 2) Momentive SEC 2600 Elemax
  - f. Henry:
    - 1) Air Bloc 16MR
    - 2) Air Bloc 17MR
    - 3) Air Bloc 21S
    - 4) Air Bloc 31MR
    - 5) Air Bloc 33MR
  - g. PolyGuard
    - 1) Air Lok Flex VP
    - 2) Flexguard
    - 3) Air Lok Flex (Please contact Hunter Xci for cladding options)
  - h. Prosoco:
    - 1) R Guard Spray Wrap MVP
    - 2) R Guard CAT-5
    - 3) R Guard CAT-5 Rainscreen
    - 4) R Guard VB
  - i. StoCorp
    - 1) Sto Gold Coat
  - j. VaproShield:
    - 1) Wrap Shield SA
    - 2) Reveal Shield SA
  - k. WR Grace:
    - 1) Perm-a-barrier NPL
    - 2) Perm-a-barrier VPL or VPL LT
    - 3) Perm-a-barrier VPS
    - 4) Perm-a-barrier NP 20
    - 5) Perm-a-barrier Aluminum Wall Membrane
  - l. WR Meadows
    - 1) Air Shield LMP (Gray or Black)
    - 2) Air Shield TMP
    - 3) Air Shield LSR
  - m. Pecora
    - 1) XL Perm Ultra VP
  - n. None.

B. NFPA 285 Exterior Wall Assembly – Steel Stud:

1. Base Wall System: Steel Stud, 1 layer 5/8 inch (16 mm) thick Type X, installed over steel studs: minimum 3-5/8 inches (92 mm) depth, minimum 22 gauge at a maximum of 24 inches (610 mm) o.c. with lateral bracing every 4 feet (1220 mm) vertically.
2. Approved Exterior Finish:
  - a. Masonry: Brick veneer anchors, standard types, installed maximum 24 inches (610 mm) o.c. vertically. Maximum 2 inch (51 mm) air gap between exterior insulation and brick. Standard nominal 4 inches (102 mm) thick or greater, clay brick.
  - b. Stucco: Minimum 1/2 inch (13 mm) thick, Exterior Cement Plaster and Lath.
  - c. Limestone or Natural Stone: Minimum 1-1/4 inch (32 mm) thick, Limestone or Natural Stone Veneer or minimum 1-1/2 inches (38 mm) thick Cast Artificial Stone Veneer. Any standard installation technique can be used.
  - d. Terra Cotta Cladding: Use any Terra Cotta Cladding System in which Terra Cotta is minimum 1/2 inch (13 mm). Any standard installation technique can be used.
  - e. Thin Brick or Cultured Stone: Use any metal lath and thin set adhesive tested by the panel manufacturer via the NFPA 285 test method. Minimum of 3/4 inch (18 mm). Any standard installation technique can be used.
  - f. Metal Composite Material: Use any Metal Composite Material system that has been successfully tested by the panel manufacturer via the NFPA 285 test method. Any standard installation technique can be used.
  - g. Exterior Metal: Metal Exterior wall coverings: Steel, Aluminum, Copper or Zinc. Any standard installation technique can be used.
  - h. Fiber Cement Board siding. Any standard installation technique can be used.
  - i. Stone Aluminum: Stone Aluminum Honeycomb Composite Panels that have been successfully tested by the panel manufacturer via the NFPA 285 test method. Any standard installation technique can be used.
  - j. Autoclaved-aerated-concrete (AAC) panels that have been successfully tested by the panel manufacturer via the NFPA 285 test method. Any standard installation technique can be used.
  - k. FunderMax M.Look Grey Core- minimum 1/4" thick using any standard installation technique.
3. Panel Thickness:
  - a. 3.5 inches (89 mm) maximum, NFPA 285 approved.
  - b. 3.6 to 4.0 inches (91 to 102 mm), contact Hunter Panels Xci for NFPA 285 approvals.
4. Stud Cavity:
  - a. Any non-combustible insulation.
  - b. Any Fiberglass or Mineral Fiber rated as Class A per ASTM E 84
  - c. BASF: Walltite (Minimum: 1½ inch)
  - d. Covestro (Formerly Bayer): BaySeal CC X or CC XP (Minimum: 1½ inch)
  - e. Icynene MD-C200v3
  - f. NCIF InsulBloc SPF
  - g. SWD Urethane Quik-Sheild 112
  - h. None.
5. Exterior Sheathing: 1/2 inch (12.5 mm) or 5/8 inch (16 mm) thick exterior type gypsum sheathing or none. Required with SPF insulation.
6. Floorline Firestopping: 4 lb/cu ft mineral fiber based safing insulation in each stud cavity and at each floor line, attached with Z Clips or equivalent.
7. Weather Resistive Membrane Applied to Base Wall: Acceptable products are:
  - a. Carlisle:
    - 1) Fire Resist Barritech VP or VP LT
    - 2) Fire Resist Barritech NP
    - 3) Fire Resist 705 FR-A
    - 4) Fire Resist 705 VP
  - b. BASF:

- 1) Enershield I
- 2) Enershield HP
- c. Cosella Dorken
  - 1) Delta-Vent SA
  - 2) Delta-Vent S
  - 3) Delta-Fassade S
  - 4) Delta Maxx
- d. Dryvit:
  - 1) Backstop NT
- e. DuPont:
  - 1) Tyvec ComercialWrap or Commercial Wrap D
- f. GE:
  - 1) Momentive SEC 2500 SilShield
  - 2) Momentive SEC 2600 Elemax
- g. Henry:
  - 1) Air Bloc 16MR
  - 2) Air Bloc 17MR
  - 3) Air Bloc 21S
  - 4) Air Bloc 31MR
  - 5) Air Bloc 33MR
  - 6) Blueskin SA (Please contact Hunter Xci for cladding options)
- h. PolyGuard:
  - 1) Air Lok Flex VP
  - 2) Flexguard
  - 3) Air Lok Flex (Please contact Hunter Xci for cladding options)
- i. Prosoco:
  - 1) R Guard Spray Wrap MVP
  - 2) R Guard CAT-5
  - 3) R Guard CAT-5 Rainscreen
  - 4) R Guard VB
- j. StoCorp:
  - 1) StoGuard VaporSeal
- k. VaproShield:
  - 1) Wrap Shield SA
  - 2) Reveal Shield SA
- l. WR Grace:
  - 1) Perm-a-barrier VPS
  - 2) Perm-a-barrier NPL
  - 3) Perm-a-barrier VPL or VPL LT
  - 4) Perm-a-barrier VPL 50 (Please contact Hunter Xci for cladding options)
  - 5) Perm-a-barrier NP 10 (Please contact Hunter Xci for cladding options)
  - 6) Perm-a-barrier NP 20
  - 7) Perm-a-barrier Aluminum Wall Membrane
- m. WR Meadows
  - 1) Air Shield LMP (Gray or Black)
  - 2) Air Shield TMP
  - 3) Air Shield LSR
- n. 3M:
  - 1) 3015 (with Hold Fast adhesive at a 6 mil thickness)
- o. Pecora
  - 1) XL Perm Ultra VP
- p. None
- 8. Weather Resistive Membrane Applied to Exterior Insulation: Acceptable products are:
  - a. Carlisle:
    - 1) Fire Resist Barritech VP or VP LT
    - 2) Fire Resist Barritech NP

- 3) Fire Resist 705 FR-A
- 4) Fire Resist 705 VP
- b. Cosella Dorken
  - 1) Delta-Vent SA
  - 2) Delta-Vent S
  - 3) Delta-Fassade S
  - 4) Delta Maxx
- c. Dryvit:
  - 1) Backstop NT
- d. DuPont:
  - 1) Tyvec ComercialWrap
- e. GE:
  - 1) Momentive SEC 2500 SilShield
  - 2) Momentive SEC 2600 Elemax
- f. Henry:
  - 1) Air Bloc 16MR
  - 2) Air Bloc 17MR
  - 3) Air Bloc 21S
  - 4) Air Bloc 31MR
  - 5) Air Bloc 33MR
- g. PolyGuard
  - 1) Air Lok Flex VP
  - 2) Flexguard
  - 3) Air Lok Flex (Please contact Hunter Xci for cladding options)
- h. Prosoco:
  - 1) R Guard Spray Wrap MVP
  - 2) R Guard CAT-5
  - 3) R Guard CAT-5 Rainscreen
  - 4) R Guard VB
- i. StoCorp
  - 1) Sto Gold Coat
- j. VaproShield:
  - 1) Wrap Shield SA
  - 2) Reveal Shield SA
- k. WR Grace:
  - 1) Perm-a-barrier NPL
  - 2) Perm-a-barrier VPL or VPL LT
  - 3) Perm-a-barrier VPS
  - 4) Perm-a-barrier NP 20
  - 5) Perm-a-barrier Aluminum Wall Membrane
- l. WR Meadows
  - 1) Air Shield LMP (Gray or Black)
  - 2) Air Shield TMP
  - 3) Air Shield LSR
- m. Pecora
  - 1) XL Perm Ultra VP
- n. None.

C. NFPA 285 Exterior Wall Assembly – Fire Retardant Treated Wood Stud Construction:

- 1. Base Wall System: FRT Wood Stud, 1 layer 5/8 inch (16 mm) thick Type X Gypsum wallboard on interior, installed over FRT wood studs: minimum 3 5/8 inches (91 mm) depth, at a maximum of 24 inches (610 mm) o.c. with lateral bracing as required by code.
- 2. Approved Exterior Finish:
  - a. Masonry: Brick veneer anchors, standard types, installed maximum 24 inches (610 mm) o.c. vertically. Maximum 2 inch (51 mm) air gap between exterior



- insulation and brick. Standard nominal 4 inches (102 mm) thick or greater, clay brick.
- b. Stucco: Minimum 1/2 inch (13 mm) thick, Exterior Cement Plaster and Lath.
  - c. Limestone or Natural Stone: Minimum 1-1/4 inch (32 mm) thick, Limestone or Natural Stone Veneer or minimum 1-1/2 inches (38 mm) thick Cast Artificial Stone Veneer. Any standard installation technique can be used.
  - d. Terra Cotta Cladding: Use any Terra Cotta Cladding System in which Terra Cotta is minimum 1/2 inch (13 mm). Any standard installation technique can be used.
  - e. Thin Brick or Cultured Stone: Use any metal lath and thin set adhesive tested by the panel manufacturer via the NFPA 285 test method. Minimum of 3/4 inch (18 mm). Any standard installation technique can be used.
  - f. Metal Composite Material: Use any Metal Composite Material system that has been successfully tested by the panel manufacturer via the NFPA 285 test method. Any standard installation technique can be used.
  - g. Exterior Metal: Metal Exterior wall coverings: Steel, Aluminum, Copper or Zinc. Any standard installation technique can be used.
  - h. Fiber Cement Board siding. Any standard installation technique can be used.
  - i. Stone Aluminum: Stone Aluminum Honeycomb Composite Panels that have been successfully tested by the panel manufacturer via the NFPA 285 test method. Any standard installation technique can be used.
  - j. Autoclaved-aerated-concrete (AAC) panels that have been successfully tested by the panel manufacturer via the NFPA 285 test method. Any standard installation technique can be used.
  - k. FunderMax M.Look Grey Core- minimum 1/4" thick using any standard installation technique.
3. Panel Thickness:
    - a. 3.5 inches (89 mm) maximum, NFPA 285 approved.
    - b. 3.6 to 4.0 inches (91 to 102 mm), contact Hunter Panels Xci for NFPA 285 approvals.
  4. Stud Cavity:
    - a. Any non-combustible insulation.
    - b. Any Fiberglass or Mineral Fiber rated as Class A per ASTM E 84
    - c. BASF: Walltite (Minimum: 1½ inch)
    - d. Covestro (Formerly Bayer): BaySeal CC X or CC XP (Minimum: 1½ inch)
    - e. Icynene MD-C200v3
    - f. NCIF InsulBloc SPF
    - g. SWD Urethane Quik-Sheild 112
    - h. None.
  5. Exterior Sheathing: 1/2 inch (12.5 mm) or 5/8 inch (16 mm) thick exterior type gypsum sheathing or FRT structural panels or none. Required with SPF insulation.
  6. Floorline Firestopping: 4 lb/cu ft mineral fiber based safing insulation in each stud cavity and at each floor line, attached with Z Clips or equivalent.
  7. Weather Resistive Membrane Applied to Base Wall: Acceptable products are:
    - a. Carlisle:
      - 1) Fire Resist Barritech VP or VP LT
      - 2) Fire Resist Barritech NP
      - 3) Fire Resist 705 FR-A
      - 4) Fire Resist 705 VP
    - b. BASF:
      - 1) Enershield I
      - 2) Enershield HP
    - c. Cosella Dorken
      - 1) Delta-Vent SA
      - 2) Delta-Vent S
      - 3) Delta-Fassade S

- 4) Delta Maxx
- d. Dryvit:
  - 1) Backstop NT
- e. DuPont:
  - 1) Tyvec ComercialWrap or Commercial Wrap D
- f. GE:
  - 1) Momentive SEC 2500 SilShield
  - 2) Momentive SEC 2600 Elemax
- g. Henry:
  - 1) Air Bloc 16MR
  - 2) Air Bloc 17MR
  - 3) Air Bloc 21S
  - 4) Air Bloc 31MR
  - 5) Air Bloc 33MR
  - 6) Blueskin SA (Please contact Hunter Xci for cladding options)
- h. PolyGuard:
  - 1) Air Lok Flex VP
  - 2) Flexguard
  - 3) Air Lok Flex (Please contact Hunter Xci for cladding options)
- i. Prosoco:
  - 1) R Guard Spray Wrap MVP
  - 2) R Guard CAT-5
  - 3) R Guard CAT-5 Rainscreen
  - 4) R Guard VB
- j. StoCorp:
  - 1) StoGuard VaporSeal
- k. VaproShield:
  - 1) Wrap Shield SA
  - 2) Reveal Shield SA
- l. WR Grace:
  - 1) Perm-a-barrier VPS
  - 2) Perm-a-barrier NPL
  - 3) Perm-a-barrier VPL or VPL LT
  - 4) Perm-a-barrier VPL 50 (Please contact Hunter Xci for cladding options)
  - 5) Perm-a-barrier NP 10 (Please contact Hunter Xci for cladding options)
  - 6) Perm-a-barrier NP 20
  - 7) Perm-a-barrier Aluminum Wall Membrane
- m. WR Meadows
  - 1) Air Shield LMP (Gray or Black)
  - 2) Air Shield TMP
  - 3) Air Shield LSR
- n. 3M:
  - 1) 3015 (with Hold Fast adhesive at a 6 mil thickness)
- o. Pecora
  - 1) XL Perm Ultra VP
- p. None
- 8. Weather Resistive Membrane Applied to Exterior Insulation: Acceptable products are:
  - a. Carlisle:
    - 1) Fire Resist Barritech VP or VP LT
    - 2) Fire Resist Barritech NP
    - 3) Fire Resist 705 FR-A
    - 4) Fire Resist 705 VP
  - b. Cosella Dorken
    - 1) Delta-Vent SA
    - 2) Delta-Vent S
    - 3) Delta-Fassade S

- 4) Delta Maxx
- c. Dryvit:
  - 1) Backstop NT
- d. DuPont:
  - 1) Tyvec ComercialWrap
- e. GE:
  - 1) Momentive SEC 2500 SilShield
  - 2) Momentive SEC 2600 Elemax
- f. Henry:
  - 1) Air Bloc 16MR
  - 2) Air Bloc 17MR
  - 3) Air Bloc 21S
  - 4) Air Bloc 31MR
  - 5) Air Bloc 33MR
- g. PolyGuard
  - 1) Air Lok Flex VP
  - 2) Flexguard
  - 3) Air Lok Flex (Please contact Hunter Xci for cladding options)
- h. Prosoco:
  - 1) R Guard Spray Wrap MVP
  - 2) R Guard CAT-5
  - 3) R Guard CAT-5 Rainscreen
  - 4) R Guard VB
- i. StoCorp
  - 1) Sto Gold Coat
- j. VaproShield:
  - 1) Wrap Shield SA
  - 2) Reveal Shield SA
- k. WR Grace:
  - 1) Perm-a-barrier NPL
  - 2) Perm-a-barrier VPL or VPL LT
  - 3) Perm-a-barrier VPS
  - 4) Perm-a-barrier NP 20
  - 5) Perm-a-barrier Aluminum Wall Membrane
- l. WR Meadows
  - 1) Air Shield LMP (Gray or Black)
  - 2) Air Shield TMP
  - 3) Air Shield LSR
- m. Pecora
  - 1) XL Perm Ultra VP
- n. None.

## 1.5 DESIGN REQUIREMENTS

- A. Perform work in accordance with all federal, state and local codes.
- B. Physical properties (Foam Core):
  - 1. Flame Spread Index: ASTM E 84, less than 25.
  - 2. Smoke Developed: ASTM E 84, less than 250.
  - 3. Compressive Strength: ASTM D 1621; Type I, Grade 3 - 25 psi (172 kPa).
  - 4. Dimensional Stability: ASTM D 2126, 2 percent linear change (7 days).
  - 5. Moisture Vapor Permeance: ASTM E 96, less than 0.04 perm (2.875ng/(Pa•s•m2)).
  - 6. Water Absorption: ASTM C 209, less than 0.05 percent by volume.
  - 7. Service Temperature: Minus 100 degrees to 250 degrees F (Minus 73 degrees C to 122 degrees C).
  - 8. Air Permeance of Building Material: ASTM E 2178, less than 0.001 L(s.m2) at 75 Pa

9. Air Leakage of Air Barrier Assemblies: ASTM E 2357, no leakage
  10. Rate of Air Leakage: ASTM E 283, less than 0.04 cfm/ft<sup>2</sup>
  11. Structural Performance by Uniform Static Air Pressure Difference: ASTM E 330, less than 0.04 cfm/ft<sup>2</sup>
  12. Water Penetration by Static Air Pressure Difference: ASTM E 331, pass, no leakage
  13. Resistance to Mold: ASTM D 3273 Passed (10).
  14. Impact Resistance: ASTM D 1037, 40 Janka Ball Test.
- C. Continuous insulation Xci Foil (Class A) wall panels shall meet the continuous insulation standards of ASHRAE 90.1-2010, ICB Chapter 26 and IECC 2012.
- D. Xci Foil (Class A) wall panels shall be Miami-Dade County Product Control Approved under Miami-Dade County FL NOA No: 14-0501.01.
- E. Xci Foil (Class A) wall panels shall be listed by the California Bureau of Furnishings and Home Insulation.

#### 1.6 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on wall panels and fasteners to be used, including:
1. Preparation instructions and recommendations.
  2. Storage and handling requirements and recommendations.
  3. Installation methods.
- C. LEED Submittals: Provide documentation of how the requirements of Credit will be met:
1. List of proposed materials with recycled content. Indicate post-consumer recycled content and pre-consumer recycled content for each product having recycled content.
  2. Environmental Product Declaration which conforms to ISO 14025
- D. Manufacturer's Certificate: Certify panels will conform to specified performance requirements.

#### 1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer shall be a company that regularly manufactures and assembles specified insulation in house with no outside fabrication operations.
- B. Pre-Installation Meeting: Convene minimum one week prior to commencing Work of this section. Review installation procedures and coordination required with Related Work and include the following:
1. Participants: Authorized representatives of the Contractor, Architect, Installer, and Manufacturer.
  2. Review wall assemblies for potential interference and conflicts and coordinate layout and support provisions for interfacing work.
  3. Review continuous insulation wall panels installation methods and procedures related to application, including manufacturer's installation guidelines.
  4. Review firestopping requirements and weather resistive membrane requirements and placement locations.
  5. Review field quality control procedures.

#### 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Good construction practice dictates that all insulations should be protected from moisture and direct sunlight during job-site storage. Pallets of Hunter Panels Xci CG are double packaged in a UV resistant polyethylene bag. This moisture resistant package is designed for protection from the elements during flatbed shipment from our factories to the job-site. Outdoor storage for extended periods of time requires waterproof tarpaulins and elevated storage above ground level a minimum of 2". Additionally, we recommend slitting the bundle packaging vertically down the center of the two short sides to prevent moisture accumulation within the package.

## 1.9 SEQUENCING

- A. Coordinate with the installation of vapor retarders and air seal materials specified in Section 07260 and Section 07270.
- B. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

## 1.10 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Insulating panels shall be XCI products produced by Hunter Panels, 15 Franklin Street, Portland, Maine 04101. Phone: (207) 761-5678 or (888) 746-1114. Fax: (877) 115-1769. E-mail: [info@hpanels.com](mailto:info@hpanels.com).
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

### 2.2 BOARD INSULATION

- A. Board Insulation with Foil Facers: Hunter Panels Xci Foil (Class A) complies with ASTM C 1289 and ASTM E 84 Class A. Panels are a high thermal resistive rigid insulation panel composed of a closed cell polyisocyanurate foam core bonded on both sides to reinforced foil facers.
  - 1. Type: ASTM C 1289, Type I
    - a. Grade 3 (25 psi).
  - 2. Panel Size:
    - a. 4 feet by 8 feet (1220 mm by 2440 mm).
  - 3. Thickness / R Value: ASTM C 518 at 75 degrees F (23.9 degrees C).
    - a. 1.0 inches (25 mm) / R Value 6.3
    - b. 1.5 inches (38 mm) / R Value 9.5
    - c. 1.6 inches (40 mm) / R Value 10.1
    - d. 2.0 inches (51 mm) / R Value 13.0
    - e. 2.5 inches (64 mm) / R Value 16.0
    - f. 3.0 inches (76 mm) / R Value 19
    - g. 3.5 inches (89 mm) / R Value 22
    - h. 4.0 inches (100 mm) / R Value 25.2
    - i. Provide to the thickness indicated on the Drawings.

## 2.3 PANEL FASTENERS

- A. Panel fasteners shall be corrosion resistant type as approved Hunter Panel fasteners. Length of fasteners shall be as recommended by the panel manufacturer

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Do not begin installation until exterior walls have been properly prepared.
- B. Verify that all exterior wall assembly construction has been completed to the point where the insulation may correctly be installed.
- C. Verify that mechanical and electrical services in walls have been installed and tested and, if appropriate, verify that adjacent materials and finishes are dry and ready to receive insulation.
- D. If wall assembly preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Install in accordance with manufacturer's instructions.
- D. Install in exterior spaces without gaps or voids. Do not compress insulation.
- E. Trim insulation neatly to fit spaces. Insulate miscellaneous gaps and voids.
- F. Fit insulation tight in spaces and tight to exterior side of mechanical and electrical services within plane of insulation.
- G. Exposed insulation must be protected from open flame and stored in accordance with manufacturer's instructions.
- H. Fasten insulation to the structural base wall. Coordinate with the cladding or wall finish manufacturer for the attachment requirements over insulation panels. Contact Hunter Panels for guidance when determining fastening pattern.
- I. Install vapor retarders over insulation panels as specified in Section 07260.
- J. Install air barriers over insulation panels as specified in Section 07270.
- K. Exterior wall insulation is not intended to be left exposed for extended periods of time in excess of 180 days without adequate protection. If extended exposure is anticipated all exposed foam surfaces including corners, window and door openings, should be taped with a compatible waterproof tape.
- L. Install exterior cladding as recommended by the cladding manufacturer and as specified in other sections of this specification.

### 3.3 PROTECTION

- A. Protect installed products until completion of project.
- B. Cover the top and edges of unfinished wall panel work to protect it from the weather and to prevent accumulation of water in the cores of the panels.
- C. Wet panels shall be allowed to completely dry prior to application of vapor barrier and/or cladding.
- D. Repair or replace damaged products before Substantial Completion.

END OF SECTION