



LISTING REPORT

Number:

UEL-5032

Originally Issued: 08/15/2019

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Valid Through: 08/31/2022

TK PRODUCTS

A DIVISION OF SIERRA CORPORATION

11400 West 47th Street

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LISTING SUBJECTS:

TK-AirMax 2101 Non-Permeable SB

TK-AirMax 2102 Non-Permeable SB

TK-AirMax 2103 Non-Permeable WB

TK-AirMax 2104 Vapor Permeable WB

TK-AirMax 2105 Vapor Permeable SB

TK-HydroMax 2001 SB

TK-HydroMax 2002 SB

TK-HydroMax 2003 WB

TK-Climate Tech

CSI Section:

07 27 26 Fluid Applied Membrane Air Barriers

1.0 RECOGNITION

1.1 Compliance with the following standard:

- Evaluated for conformance to the acceptance criteria of NFPA 285-12, Standard Fire Test Method for the Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components.

1.2 Properties assessed:

- Vertical and lateral fire propagation

2.0 LIMITATIONS

Use of the TK-AirMax 2101 Non-Permeable SB, TK-AirMax 2102 Non-Permeable SB, TK-AirMax 2103 Non-Permeable WB, TK-AirMax 2104 Vapor Permeable WB, TK-AirMax 2105 Vapor Permeable SB, TK-HydroMax 2001 SB, TK-HydroMax 2002 SB, TK-HydroMax 2003 WB and TK-Climate Tech 2206 Vapor Permeable WB recognized in this report is subject to the following limitations:

2.1 The products noted in section 1.0 of this report shall be installed in accordance with the applicable code, the manufacturer's published installation instructions, and this report. Where there is a conflict, the more restrictive requirements shall govern.

2.2 To be considered as conforming with NFPA 285 – 12, the assemblies shall be as described in one of the Tables 1 through 5 of this report.

2.3 The code classification of vapor, weather or water barriers, is beyond the scope of this listing report.

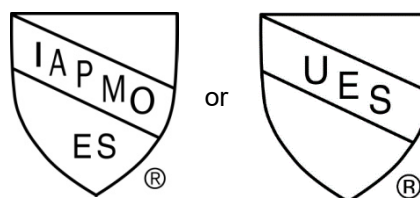
2.4 The products recognized in this report are produced by TK Products in Minnetonka, MN.

3.0 DESCRIPTION

As noted in UEL-5006 the TK-AirMax 2101 Non-Permeable SB and TK-HydroMax 2001 SB are solvent-based, fluid-applied coatings. The TK-AirMax 2102 Non-permeable SB and TK-HydroMax 2002 SB are fluid-applied, rubberized polymer coatings that have a resistance to hydrostatic pressure. The TK-AirMax 2103 Non-Permeable WB and TK-HydroMax 2003 WB are solvent-based fluid-applied, rubberized polymer coatings. The TK-AirMax 2104 Vapor Permeable WB is a water-based fluid-applied, rubberized polymer coating. The TK-AirMax 2105 Vapor Permeable SB is a water-based, fluid-applied, rubberized polymer coating. The TK-Climate Tech 2206 Vapor Permeable WB is a water-based, fluid-applied, rubberized polymer coating. The coatings are packaged in 55-gallon (208 L) drums and 5-gallon (18.9 L) pails and stored at temperatures between 40°F to 100°F (4.4°C to 38°C). Each of the coatings when stored in factory-sealed containers at the recommended temperatures, have a two-year shelf-life except for the TK-AirMax 2105 Vapor Permeable SB which has a one-year shelf-life.

4.0 IDENTIFICATION

TK-AirMax 2101 Non-Permeable SB, TK-AirMax 2102 Non-Permeable SB, TK-AirMax 2103 Non-Permeable WB, TK-AirMax 2104 Vapor Permeable WB, TK-AirMax 2105 Vapor Permeable SB, TK-HydroMax 2001 SB, TK-HydroMax 2002 SB, TK-HydroMax 2003 WB and TK-Climate Tech 2206 Vapor Permeable WB are identified with a label bearing the manufacturer's name (TK Products – A Division of Sierra Corporation), product name, address, one of the IAPMO Uniform ES Marks of Conformity, the listing number, (UEL-5032), and the name of the inspection agency (Quality Control Consultants). Either Mark of Conformity may be used as follows:



IAPMO UES UEL-5032

The product described in this Uniform Evaluation Service (UES) Report has been evaluated as an alternative material, design or method of construction in order to satisfy and comply with the intent of the provision of the code, as noted in this report, and for at least equivalence to that prescribed in the code in quality, strength, effectiveness, fire resistance, durability and safety, as applicable, in accordance with IBC Section 104.11. This document shall only be reproduced in its entirety.

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5.0 SUBSTANTIATING DATA

5.1 Evaluation Listing UEL-5006.

5.2 Engineering analysis of NFPA 285.

6.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research carried out by IAPMO Uniform Evaluation Service on TK Products-A Division of Sierra Corporation materials noted in Section 1.1 to assess conformance to the standard noted in Section 1.2 when installed as a component of wall systems described in Tables 1 through 5 of this report and serves as documentation of the product certification. Products are manufactured at locations noted in Section 2.4 of this report under a quality control program with periodic inspections under the supervision of IAPMO UES.

For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org



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Table 1
Walls Containing TK Products Coatings
For use only with Atlas Polyisocyanurate Insulation

Wall Component	
Base Wall – Use either 1, 2, 3 or 4	<ol style="list-style-type: none"> 1) 1" min. Cast Concrete Walls 2) 1" min. CMU Concrete Walls 3) 20 GA (min.) 3⁵/₈" (min.) steel studs spaced 24" OC (max.) 5⁸/₈ in. type X Gypsum Wallboard Interior 4) FRT wood studs spaced 24 in. OC (max.) with 5⁸/₈ in. type X Gypsum Wallboard Interior
Fire-Stopping in Stud Cavity at floor lines – Use 1 or 2	<ol style="list-style-type: none"> 1) None 2) 4 lb/ft³ mineral wool (e.g., Thermafiber) in each stud cavity at each floor line – attached with Z-clips or equivalent
Cavity Insulation - Use any Item 1 - 16 Note: Cavity Insulations 5 - 16 must use floor line fire-stopping compliant with Item 2 and 5 ⁸ / ₈ " exterior gypsum sheathing.	<ol style="list-style-type: none"> 1) None 2) Any noncombustible insulation per ASTM E136 3) Any mineral fiber (Board type Class A ASTM E84 faced or unfaced) 4) Fiberglass (Batt type Class A ASTM E84 faced or unfaced) 5) 5¹/₂" (max.) Icynene LD-C-50 spray foam in 6" deep studs (max.) full fill without an air gap 6) 5¹/₂" (max.) Icynene MD-C-200, 2 pcf spray foam in 6" deep studs (max.) full fill without an air gap 7) 5¹/₂" (max.) Icynene MD-R-210, 2 pcf spray foam in 6" deep studs (max.) full fill without an air gap 8) 6" (max.) SWD Urethane QS 112, 2 pcf spray foam in 6" deep studs (max.) or partial fill with a maximum 2¹/₂" air gap 9) 3¹/₂" (max.) Gaco Western 183M spray foam in 3⁵/₈" deep studs (max.) 10) Gaco Western F1850 (3¹/₂" max.). Use with 5⁸/₈" exterior sheathing in 3⁵/₈" deep studs (max.) 11) Demilec Sealection 500 (3⁵/₈" max.). Use with 5⁸/₈" exterior sheathing in 3⁵/₈" deep studs (max.) 12) Demilec HeatLok Soy 200 Plus (3.4" max.). Use with 5⁸/₈" exterior sheathing in 3⁵/₈" deep studs (max.) 13) Bayer Bayseal (3" max.). Use with 5⁸/₈" exterior sheathing. 14) Lapolla FoamLok FL 2000 (3" max.). Use with 5⁸/₈" exterior sheathing in 3⁵/₈" deep studs (max.) 15) BASF SprayTite 81206 or WallTite (US & US-N) (3⁵/₈" max.). Use with 5⁸/₈" exterior sheathing in 3⁵/₈" deep studs (max.) 16) Accella (Premium Spray Products) Foamsulate 220 (3⁵/₈ in. max.). Use with 5⁸/₈ inch exterior sheathing in 3⁵/₈ in. deep studs (max.).
Exterior Sheathing – Use either 1 or 2 Must be used when SPF is used. See sheathing thickness specified above.	<ol style="list-style-type: none"> 1) 1/2" or thicker exterior gypsum sheathing 2) 2" precast concrete panels attached to structural elements of building
Air Barrier or Weather Resistive Barrier Applied to Exterior	<ol style="list-style-type: none"> 1) AirMax 2101 NP SB 2) HydroMax 2001SB 3) AirMax 2102 NP SB



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sheathing or base wall surface – Use any Item 1 - 9.	<ol style="list-style-type: none">4) HydroMax 2002SB5) AirMax 2103 NP WB6) HydroMax 2003WB7) AirMax 2104 VP WB8) AirMax 2105 VP SB9) Climate Tech
Exterior Insulation – Use either 1, 2 or 3	<ol style="list-style-type: none">1) 4" (max.) EnergyShield Pro (or Pro2)2) 4" (max.) RBoard Pro (or EnergyShield CGF Pro)3) 4³/₄" (max.) EnergyShield Ply Pro (4" EnergyShield CGF Pro w/ ⁵/₈" or ³/₄" FRT Plywood). <p>Items 1 - 3 may be multiple layers of 1 inch thick (min.). Items 1 - 3 may be multiple layers of thinner product with facers on each side.</p>
Exterior Cladding – Use any Item 1 - 14 Note: Cladding 8 (Zinc) may only be used with EnergyShield Pro or Pro2.	<ol style="list-style-type: none">1) Brick<ol style="list-style-type: none">a. Brick Veneer Anchors – standard types – installed maximum 24" OC (max.) vertically on each studb. Maximum 2" air gap between exterior insulation and brick.c. Standard Nominal 4" thick clay brick or veneer2) Stucco – minimum ³/₄" thick exterior cement plaster and the lath. A secondary WRB can be installed between the exterior insulation and lath. The secondary WRB shall not be full coverage asphalt or butyl based self-adhering membranes.3) Limestone – minimum 2" thick4) Natural Stone Veneer – minimum 2" thick5) Cast Artificial Stone – minimum 1¹/₂" thick complying with ICC-ES AC 516) Terra Cotta Cladding – Use any terracotta cladding system in which terracotta is minimum 1¹/₄" thick. Any installation technique can be used.7) Any ACM that has passed NFPA 2858) Uninsulated sheet metal building panels including aluminum, steel, copper or zinc (see note)9) Uninsulated fiber-cement cladding panels minimum ¹/₄" thick10) Stone/Aluminum honeycomb composite building panels that have successfully passed NFPA 285 criteria.11) Autoclaved-aerated-concrete (AAC) panels minimum 1¹/₂" thick.12) Reynobond Zinc ZCM Zinc metal composite panel13) Terreal Zephir Evolution Rainscreen System (terra cotta), minimum ⁹/₁₆" thick14) FunderMax M.Look using the manufacturer standard installation technique. The air gap between the cladding and insulation or WRB must not exceed 1¹/₂ inches.



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Table 2
Walls Containing TK Products Coatings
For use only with RMax Polyisocyanurate Insulation

Wall Component	
Base Wall – Use either 1, 2, 3 or 4 Note: May use 4 optionally when FRTW framing is allowed by code.	<ol style="list-style-type: none">1) Cast Concrete Walls2) CMU Concrete Walls3) 20 GA. (min.) 3$\frac{5}{8}$ in. (min.) steel studs spaced 24 in. OC (max.)<ol style="list-style-type: none">a. $\frac{5}{8}$ in. type X Gypsum Wallboard Interiorb. Bracing as required by code.4) Where allowed in Types I, II, III or IV construction, FRTW (Fire-retardant-treated wood) studs complying with IBC Section 2303.2, min. nominal 2 x 4 dimension, spaced 24" OC (max.)<ol style="list-style-type: none">a. $\frac{5}{8}$ in. type X Gypsum Wallboard Interiorb. Bracing as required by code
Fire-Stopping in Stud Cavity at floor lines – As any option, use 2 with FRTW framing	<ol style="list-style-type: none">1) 4 pcf mineral wool installed with z-clips2) FRTW fire blocking at floor line in accordance with applicable code requirements
Cavity Insulation – Use either 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 or 15 Note. Items 5 - 15 are SPF Foam Type EZ FLO may be used inside the box headers and jamb studs for NFPA 285 assemblies requiring SPF in stud cavities.	<ol style="list-style-type: none">1) None2) Any noncombustible insulation per ASTM E1363) Any Mineral Fiber (Board type Class A ASTM E84 faced or unfaced)4) Any Fiberglass (Batt Type Class A ASTM E84 faced or unfaced)5) 5$\frac{1}{2}$ inch (max.) Icynene LD-C-50 spray foam in 6 inch deep studs (max.). Use with $\frac{5}{8}$ inch exterior sheathing.6) 5$\frac{1}{2}$ inch (max.) Icynene MD-C-200 2 pcf spray foam in 6 inch deep studs (max.) full fill without an air gap. Use with $\frac{5}{8}$ inch exterior sheathing.7) 5$\frac{1}{2}$ inch (max.) Icynene MD-R-210 2 pcf spray foam in 6 inch deep studs (max.) full fill without an air gap. Use with $\frac{5}{8}$ inch exterior sheathing.8) SWD Urethane QS 112 2 pcf spray foam in 6 inch deep studs (max.) partial fill with a maximum 2$\frac{1}{2}$ inch air gap or full fill. Use with $\frac{5}{8}$ inch exterior sheathing.9) Gaco Western 183M (3$\frac{1}{2}$ inch max.). Use with $\frac{5}{8}$ inch exterior sheathing.10) Gaco Western F1850 (3$\frac{1}{2}$ inch max.). Use with $\frac{5}{8}$ inch exterior sheathing.11) Demilec Sealection 500 (3$\frac{5}{8}$ inch max). Use with $\frac{5}{8}$ inch exterior sheathing.12) Demilec HeatLok Soy 200 Plus (3.4 inch max). Use with $\frac{5}{8}$ inch exterior sheathing.13) Bayer Bayseal (3 inch max). Use with $\frac{5}{8}$ inch exterior sheathing.14) Lapolla FoamLok FL 2000 (3 inch max). Use with $\frac{5}{8}$ inch exterior sheathing.15) BASF SprayTite 81206 or WallTite (US & US-N) (3$\frac{5}{8}$ inch max). Use with $\frac{5}{8}$ inch exterior sheathing.



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Exterior Sheathing – Use 1 or 2	<ol style="list-style-type: none">1) ½ in. or thicker exterior gypsum sheathing2) ½" (min.) FRTW structural panels complying with IBC Section 2303.2 and installed in accordance with code allowances for Types I, II, III or IV construction <p>Note – exterior FRTW sheathing or gypsum board is optional for Base Walls 1 and 2. When SPF is used, 5/8 inch exterior gypsum sheathing must be used.</p>
WRB Over Sheathing or base wall surface – use any Item 1 - 9	<ol style="list-style-type: none">1) AirMax 2101 NP SB2) HydroMax 2001 SB3) AirMax 2102 NP SB4) HydroMax 2002 SB5) AirMax 2103 NP WB6) HydroMax 2003 WB7) AirMax 2104 VP WB8) AirMax 2105 VP SB9) Climate Tech
Exterior Insulation – Use either 1, 2 or 3	<ol style="list-style-type: none">1) 4½ in. (max. consisting of a single panel or multiple thinner panels) Rmax TSX-85002) 4½ in. (max. consisting of a single panel or multiple thinner panels) Rmax ECOMAXci3) 4½ in. (max. consisting of a single panel or multiple thinner panels) Rmax TSX-8510
Exterior Cladding - Use either 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 or 13	<ol style="list-style-type: none">1) Brick – Nominal 4 in. clay brick or veneer with maximum 2 in. air gap behind the brick. Brick Ties/Anchors 24 in. OC (max.)
	<ol style="list-style-type: none">2) Stucco – minimum ¾ in. thick exterior cement plaster and lath with an optional secondary water resistive barrier between the exterior insulation and lath. The secondary barrier shall not be full coverage asphalt or self-adhered butyl membrane.3) Limestone – minimum 2 in. thick using any standard installation technique4) Natural Stone Veneer – minimum 2 in. thick using any standard installation technique5) Cast Artificial Stone – minimum 1½ in. thick complying with ICC-ES AC 51 using any standard installation technique6) Terra Cotta Cladding – minimum 1¼ in. thick using any standard installation technique7) Any MCM or ACM (aluminum, steel, copper, zinc) (w/ 2½ in. max. air gap) that has successfully passed NFPA 285 using any standard installation technique such as Carter Companies EVO Architectural Panel Systems for use with FR ACM/MCM NFPA 285 material.8) Uninsulated sheet metal building panels including aluminum, zinc, steel or copper using any standard installation technique9) Uninsulated fiber-cement siding using any standard installation technique10) Stone/Aluminum honeycomb composite building panels that have passed NFPA 285 or equivalent Stone Panels Inc. Stone Lite Panel system has been analyzed using mfr's standard installation technique.11) Autoclaved-aerated-concrete (AAC) panels that have successfully passed NFPA 285 using any standard installation technique12) Thin Set Brick - Glen Gery Thin Tech Elite has been analyzed using mfr's standard installation technique.13) Natural Stone Veneer – minimum 1¼ inch (adhered with mortar or concrete/cement based adhesive).



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Table 3
Walls Containing TK Products Coatings
For use only with Hunter Polyisocyanurate Insulation
Xci Foil (Class A) or XCi-286 Exterior Insulation

Wall Component	
Base Wall – Use either 1, 2, 3 or 4	1) Cast Concrete Walls 2) CMU Concrete Walls 3) 25 GA. min. 3 $\frac{5}{8}$ " (min.) steel studs spaced 24" OC (max.) a. $\frac{5}{8}$ " type X Gypsum Wallboard Interior b. Lateral Bracing every 4 ft 4) FRTW (Fire-retardant-treated wood) studs: min. nominal 2 x 4 dimension, spaced 24" OC (max.) a. $\frac{5}{8}$ in. type X Gypsum Wallboard Interior b. Bracing as required by code
Fire-Stopping at floor lines – Use 1 or 2	1) Any approved mineral fiber based safing insulation in each stud cavity at floor line. Safing thickness must match stud cavity depth. 2) Solid FRTW fire blocking at floor line in accordance with building code requirements for Type III construction.
Cavity Insulation – Use either: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or 11. Use only exterior sheathing option 1.	1) None 2) 1 $\frac{1}{2}$ " (min.) of Covestro EcoBay CC SPF (up to full cavity thickness) 3) 1 $\frac{1}{2}$ " (min.) of BASF Walltite SPF (up to full cavity thickness) 4) Any noncombustible insulation per ASTM E136 5) Any Mineral Fiber (Board type Class A ASTM E84 faced or unfaced) 6) Any Fiberglass (Batt Type Class A ASTM E84 faced or unfaced)
	7) Any foam plastic insulation (SPF or board type) which has been tested per ASTM E1354 (at a minimum of 20 kW/m ² heat flux) and shown by analysis to be less flammable (improved T _{ign} , Pk. HRR) than Covestro EcoBay CC or BASF Walltite 8) NCFI InsulBloc SPF (up to full cavity thickness) 9) Icynene MD-C-200v3 (Proseal) up to 5 $\frac{1}{2}$ inches (only with $\frac{1}{2}$ in. (min.) exterior gypsum sheathing) 10) SWD Urethane Quik-Shield 112 up to 6 inches in 6 inch (max.) stud cavities with an air gap not exceeding 2 $\frac{1}{2}$ inches. 11) 1 $\frac{1}{2}$ " (min.) ThermoSeal 2000 (up to full cavity thickness)
Exterior Sheathing – Use either 1, or 2	1) $\frac{1}{2}$ " or thicker exterior gypsum sheathing 2) $\frac{1}{2}$ " (min.) FRTW structural panels in Type III construction
WRB Over Base Wall Surface – use any item 1-9	1) AirMax 2101 NP SB 2) HydroMax 2001SB 3) AirMax 2102 NP SB 4) HydroMax 2002SB 5) AirMax 2103 NP WB 6) HydroMax 2003WB 7) AirMax 2104 VP WB 8) AirMax 2105 VP SB 9) Climate Tech



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Exterior Insulation – Use 1 or 2, depending on cladding.	<ol style="list-style-type: none">1) 3½" thick (max.) Xci Foil (Class A) or Xci-286 for all claddings2) 4" thick Xci Foil (Class A) or Xci-286 for claddings 1-6
Exterior Cladding - Use either 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12,13, 14, 15, 16 or 17. Item 7 may use any tested/approved installation technique. Items 8, 9 or 12 may use any standard installation technique.	<ol style="list-style-type: none">1) Brick – Nominal 4" clay or concrete brick or veneer with maximum 2" air gap behind the brick. Brick Ties/Anchors 24" OC (max.)2) Stucco – minimum ¾" thick exterior cement plaster and lath with an optional secondary water resistive barrier between the exterior insulation and lath. The secondary barrier shall not be full coverage asphalt or self-adhered butyl membrane.3) Limestone – minimum 2" thick using any standard non-open joint installation technique such as shiplap4) Natural Stone Veneer – minimum 2" thick using any standard non-open joint installation technique such as grouted/mortared stone5) Cast Artificial Stone – minimum 1½" thick complying with ICC-ES AC 51 using any standard non-open joint installation technique such as shiplap.6) Terra Cotta Cladding – minimum 1¼" thick (solid or equivalent by weight) using any standard non-open joint installation technique such as shiplap7) Any MCM that has successfully passed NFPA 2858) Uninsulated sheet metal building panels including steel, copper, aluminum or zinc9) ¼" (min.) uninsulated fiber cement siding, or porcelain or ceramic tile mechanically attached10) Stone, porcelain, ceramic/aluminum honeycomb composite building panels that have successfully passed NFPA 285 criteria11) Autoclaved-aerated-concrete (AAC) panels that have successfully passed NFPA 285 criteria12) Terra Cotta Cladding – Any Rain-screen Terra Cotta (min. ½" thick) with ventilated shiplap13) ½" Stucco – Any one coat stucco (½" min.) which meets AC11 acceptance criteria or is approved for use in Type I-IV construction or has been tested per NFPA 285 or stays in place when tested per ASTM E119 (stucco exposed to fire) for at least 30 minutes14) Thin brick/cultured stone set in thin set adhesive and metal lath that has been tested to ASTM E119 (brick exposed to furnace) and
	<p>remains in place for a minimum of 30 minutes, or has passed an NFPA 285 test. Minimum ¾" with an optional secondary water resistive barrier between the exterior insulation and lath. The secondary barrier shall not be full coverage asphalt or self-adhered butyl membrane.</p> <ol style="list-style-type: none">15) Glen Gery Thin Tech Elite Series Masonry Veneer or TABS II Panel System with ½" thick bricks using TABS Wall Adhesive16) Natural Stone Veneer – minimum 1¼" thick using any standard installation technique17) FunderMax M.Look Grey Core – minimum ¼ inch thick using any standard installation technique



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Table 4
Walls Containing TK Products Coatings
For use only with Hunter Polyisocyanurate Insulation
Xci GG (Class A) Exterior Insulation

Wall Component	
Base Wall – Use either 1, 2, 3 or 4	<ol style="list-style-type: none"> 1) Cast Concrete Walls 2) CMU Concrete Walls 3) 25 GA. min. 3$\frac{5}{8}$" (min.) steel studs spaced 24" OC (max.) <ol style="list-style-type: none"> a. $\frac{5}{8}$" type X Gypsum Wallboard Interior b. Lateral Bracing every 4 ft 4) FRTW (Fire-retardant-treated wood) studs: min. nominal 2 x 4 dimension, spaced 24" OC (max.) <ol style="list-style-type: none"> a. $\frac{5}{8}$ in. type X Gypsum Wallboard Interior b. Bracing as required by code
Fire-Stopping at floor lines	<ol style="list-style-type: none"> 1) Any approved mineral fiber based safing insulation in each stud cavity at floor line. Safing thickness must match stud cavity depth. 2) Solid FRTW fire blocking at floor line in accordance with building code requirements for Type III construction.
Cavity Insulation – Use either: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or 11 Use only exterior sheathing option 1.	<ol style="list-style-type: none"> 1) None 2) 1$\frac{1}{2}$" (min.) of Covestro EcoBay CC SPF (up to full cavity thickness) 3) 1$\frac{1}{2}$" (min.) of BASF Walltite SPF (up to full cavity thickness) 4) Any noncombustible insulation per ASTM E136 5) Any Mineral Fiber (Board type Class A ASTM E84 faced or unfaced) 6) Any Fiberglass (Batt Type Class A ASTM E84 faced or unfaced) 7) Any foam plastic insulation (SPF or board type) which has been tested per ASTM E1354 (at a minimum of 20 kW/m² heat flux) and shown by analysis to be less flammable (improved T_{ign}, Pk. HRR) than Covestro EcoBay CC or BASF Walltite 8) NCFI InsulBloc SPF (up to full cavity thickness) 9) Icynene MD-C-200v3 (Proseal) up to 5$\frac{1}{2}$ inches (only with $\frac{1}{2}$ in. (min.) exterior gypsum sheathing) 10) SWD Urethane Quik-Shield 112 up to 6 inches in 6 inch (max.) stud cavities with an air gap not exceeding 2$\frac{1}{2}$ inches. 11) 1$\frac{1}{2}$" (min.) ThermoSeal 2000 (up to full cavity thickness)
Exterior Sheathing Use 1 or 2	<ol style="list-style-type: none"> 1) $\frac{1}{2}$" or thicker exterior gypsum sheathing 2) $\frac{1}{2}$" (min.) FRTW structural panels in Type III construction
WRB on Base Wall – use any Item 1 - 9	<ol style="list-style-type: none"> 1) AirMax 2101 NP SB 2) HydroMax 2001 SB 3) AirMax 2102 NP SB 4) HydroMax 2002 SB 5) AirMax 2103 NP WB 6) HydroMax 2003 WB 7) AirMax 2104 VP WB 8) AirMax 2105 VP SB 9) Climate Tech



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Valid Through: 08/31/2022

Exterior Insulation – Use 1 or 2 depending on cladding	1) 3½" thick (max.) Xci CG (Class A) for all claddings 2) 4" thick (max.) Xci-CG (Class A) for claddings 1-6
Exterior Cladding - Use either 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 or 17 Item 7 may use any tested/approved installation technique. Items 8, 9 or 12 may use any standard installation technique	1) Brick – Nominal 4" clay or concrete brick or veneer with maximum 2" air gap behind the brick. Brick Ties/Anchors 24" OC (max.) 2) Stucco – minimum ¾" thick exterior cement plaster and lath with an optional secondary water resistive barrier between the exterior insulation and lath. The secondary barrier shall not be full coverage asphalt or self-adhered butyl membrane. 3) Limestone – minimum 2" thick using any standard non-open joint installation technique such as shiplap 4) Natural Stone Veneer – minimum 2" thick using any standard non-open joint installation technique such as grouted/mortared stone 5) Cast Artificial Stone – minimum 1½" thick complying with ICC-ES AC 51 using any standard non-open joint installation technique such as shiplap 6) Terra Cotta Cladding – minimum 1¼" thick (solid or equivalent by weight) using any standard non-open joint installation technique such as shiplap 7) Any MCM that has successfully passed NFPA 285 8) Uninsulated sheet metal building panels including steel, copper, aluminum 9) ¼" (min.) uninsulated fiber cement siding or porcelain or ceramic tile mechanically attached 10) Stone, porcelain, ceramic/aluminum honeycomb composite building panels that have successfully passed NFPA 285 criteria 11) Autoclaved-aerated-concrete (AAC) panels that have successfully passed NFPA 285 criteria 12) Terra Cotta Cladding – Any Rain-screen Terra Cotta (min. ½" thick) with ventilated shiplap 13) ½" Stucco – Any one coat stucco (½" min.) which meets AC11 acceptance criteria or is approved for use in Type I-IV construction or has been tested per NFPA 285 or stays in place when tested per ASTM E119 (stucco exposed to fire) for at least 30 minutes 14) Thin brick/cultured stone set in thin set adhesive and metal lath that has been tested to ASTM E119 (brick exposed to furnace) and remains in place for a minimum of 30 minutes, or has passed an NFPA 285 test. Minimum ¾" with an optional secondary water resistive barrier between the exterior insulation and lath. The secondary barrier shall not be full coverage asphalt or self-adhered butyl membrane. 15) Glen Gery Thin Tech Elite Series Masonry Veneer or TABS II Panel System with ½" thick bricks using TABS Wall Adhesive 16) Natural Stone Veneer – minimum 1¼" thick using any standard installation technique 17) FunderMax M.Look Grey Core – minimum ¼ inch thick using any standard installation technique



LISTING REPORT

Number:

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Valid Through: 08/31/2022

Table 5
Walls Containing TK Products Coatings
For use only with Hunter Polyisocyanurate Insulation
Xci Ply (Class A) Exterior Insulation

Wall Component	
Base Wall – Use either 1, 2, 3 or 4	1) Cast Concrete Walls 2) CMU Concrete Walls 3) 25 GA. min. 3 ⁵ / ₈ " (min.) steel studs spaced 24" OC (max.) a. 5 ⁸ / ₈ " type X Gypsum Wallboard Interior b. Lateral Bracing every 4 ft
	4) FRTW (Fire-retardant-treated wood) studs: min. nominal 2 x 4 dimension, spaced 24" OC (max.) a. 5 ⁸ / ₈ in. type X Gypsum Wallboard Interior b. Bracing as required by code
Fire-Stopping at Floor Lines	1) Any approved mineral fiber based safing insulation in each stud cavity at floor line. Safing thickness must match stud cavity depth. 2) Solid FRTW fire blocking at floor line in accordance with building code requirements for Type III construction.
Cavity Insulation – Use either: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or 11 Use only exterior sheathing option 1.	1) None 2) 1 ¹ / ₂ " (min.) of Covestro EcoBay CC SPF (up to full cavity thickness) 3) 1 ¹ / ₂ " (min.) of BASF Walltite SPF (up to full cavity thickness) 4) Any noncombustible insulation per ASTM E136 5) Any Mineral Fiber (Board type Class A ASTM E84 faced or unfaced) 6) Any Fiberglass (Batt Type Class A ASTM E84 faced or unfaced) 7) Any foam plastic insulation (SPF or board type) which has been tested per ASTM E1354 (at a minimum of 20 kW/m ² heat flux) and shown by analysis to be less flammable (improved T _{ign} , Pk. HRR) than Covestro EcoBay CC or BASF Walltite. 8) NCFI InsulBloc SPF (up to full cavity thickness) 9) Icynene MD-C-200v3 (Proseal) up to 5 ¹ / ₂ inches (only with 1/2 in. (min.) exterior gypsum sheathing) 10) SWD Urethane Quik-Shield 112 up to 6 inches in 6 inch (max.) stud cavities with an air gap not exceeding 2 ¹ / ₂ inches. 11) 1 ¹ / ₂ " (min.) ThermoSeal 2000 (up to full cavity thickness)
Exterior Sheathing – Use either 1 or 2	1) 1/2" or thicker exterior gypsum sheathing 2) 1/2" (min.) FRTW structural panels in Type III construction.
WRB Over Base Wall Surface – use any item 1-9	1) AirMax 2101 NP SB 2) HydroMax 2001 SB 3) AirMax 2102 NP SB 4) HydroMax 2002 SB 5) AirMax 2103 NP WB 6) HydroMax 2003 WB 7) AirMax 2104 VP WB 8) AirMax 2105 VP SB 9) Climate Tech
Exterior Insulation – Use 1 or 2 depending on cladding.	1) 4 ¹ / ₄ " (max.) Xci Ply (Class A) (3 ¹ / ₂ " foam max., 3/4" FR Plywood max.) with all claddings 2) 4 ³ / ₄ " (max.) Xci Ply (Class A) (4" foam max., 3/4" FR Plywood max.) may be used with claddings 1 - 6



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Exterior Cladding - Use either 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 or 17

Item 9 may use any tested/approved installation technique.

Items 10, 11 or 14 may use any standard installation technique.

- 1) Brick – Nominal 4" clay or concrete brick or veneer with maximum 2" air gap behind the brick. Brick Ties/Anchors 24" OC (max.)
- 2) Stucco – minimum ¾" thick exterior cement plaster and lath with an optional secondary water resistive barrier between the exterior insulation and lath. The secondary barrier shall not be full coverage asphalt or self-adhered butyl membrane.
- 3) Limestone – minimum 2" thick using any standard non-open joint installation technique such as shiplap
- 4) Natural Stone Veneer – minimum 2" thick using any standard non-open joint installation technique such as grouted/mortared stone
- 5) Cast Artificial Stone – minimum 1½" thick complying with ICC-ES AC 51 using any standard non-open joint installation technique such as shiplap.
- 6) Terra Cotta Cladding – minimum 1¼" thick (solid or equivalent by weight) using any standard non-open joint installation technique such as shiplap
- 7) Thin brick/cultured stone set in thin set adhesive and metal lath that has been tested to ASTM E119 (brick exposed to furnace) and

remains in place for a minimum of 30 minutes, or has passed an NFPA 285 test. Minimum ¾" with an optional secondary water resistive barrier between the exterior insulation and lath. The secondary barrier shall not be full coverage asphalt or self-adhered butyl membrane.

- 8) Glen Gery Thin Tech Elite Series Masonry Veneer or TABS II Panel System with ½" thick bricks using TABS Wall Adhesive
- 9) Any MCM that has successfully passed NFPA 285
- 10) Uninsulated sheet metal building panels including steel, copper, aluminum
- 11) ¼" (min.) uninsulated fiber-cement siding or porcelain or ceramic tile mechanically attached
- 12) Stone, porcelain, ceramic/aluminum honeycomb composite building panels that have successfully passed NFPA 285 criteria
- 13) Autoclaved-aerated-concrete (AAC) panels that have successfully passed NFPA 285 criteria
- 14) Terra Cotta Cladding – Any Rain-screen Terra Cotta (min. ½" thick) with ventilated shiplap
- 15) ½" Stucco – Any one coat stucco (½" min.) which meets AC11 acceptance criteria or is approved for use in Type I-IV construction or has been tested per NFPA 285 or stays in place when tested per ASTM E119 (stucco exposed to fire) for at least 30 minutes
- 16) Natural Stone Veneer – minimum 1¼" thick using any standard installation technique
- 17) FunderMax M.Look Grey Core – minimum ¼ inch thick using any standard installation technique