QUALITY | SERVICE | INTEGRITY

W. R. MEADOWS®

A Family Company Since 1926

# NFPA MEADOWS SUMMARY

| WALLS CONTAINING STYROFOAM XPS INSULATION | |
|---|---|
| **Wall Component** | **Materials** |
| Base wall system - Use either 1, 2 or 3 | 1 - Concrete wall<br>2 - Concrete Masonry wall<br>3 - 1 layer – ⅝-inch thick, Type X, Gypsum wallboard on interior, installed over steel studs: minimum 3⅝-inch depth, minimum 20-gauge at a maximum of 16-inch OC with lateral bracing every 4 ft. vertically |
| Floorline Firestopping | 4 lb/cu ft. mineral wool (e.g. Thermafiber) in each stud cavity and at each floorline - attached with Z-clips or equivalent |
| Cavity Insulation - Use either 1, 2 or 3 | 1 - None<br>2 - Fiberglass batt insulation (faced or unfaced)<br>3 - Any noncombustible insulation (faced or unfaced) |
| Exterior sheathing - Use either 1, 2 or 3 | 1 - None<br>2 - 1/2-inch thick, exterior type gypsum sheathing<br>3 - 5/8-inch thick, Type X, exterior type gypsum sheathing |
| Air and Water-resistive barrier applied to gypsum sheathing | W. R. MEADOWS AIR-SHIELD™ LMP (Gray)<br>W. R. MEADOWS AIR-SHIELD LMP (Black)<br>W. R. MEADOWS AIR-SHIELD TMP<br>W. R. MEADOWS AIR-SHIELD LSR<br>W. R. MEADOWS AIR-SHIELD SMP<br>W. R. MEADOWS AIR-SHIELD ALUMINUM SHEET MEMBRANE |
| Exterior insulation | STYROFOAM™ Type IV or Type X per ASTM C578 – Total thickness to be a minimum of ½ inch to maximum of 3 inches when installed using Special Conditions (see below) |
| Sealing of exterior insulation | Optional, seal all exterior insulation joints and as an option veneer tie penetrations with either:<br>a) Dow LIQUIDARMOR™ - CM Flashing and sealant – max. 60-mil wet thickness, max. 5-inch width<br>b) Acrylic, asphalt or butyl-based sealing tape – max. 4-inch width |
| Exterior Veneer - Use either 1, 2, 3, 4, or 5 | 1 – Brick – Standard nominal 4-inch thick, clay brick. Brick veneer anchors – standard types – installed maximum 24 inches OC vertically on each stud. Maximum 2-inch air gap between exterior insulation and brick.<br>2 – Concrete – 2 inches thick or greater. Maximum 2-inch air gap between exterior insulation and concrete. Any standard non-open-joint installation technique can be used.<br>3 – Concrete masonry units – 4 inches thick or greater. Maximum 2-inch air gap between exterior insulation and CMU.<br>4 – Stone Veneer – Minimum 2-inch thick, Limestone or natural stone veneer or minimum 1-1/2 inch thick cast artificial stone veneer. Any standard non-open-joint installation technique such as ship-lap, etc. can be used.<br>5 – Terracotta cladding – Use any terracotta cladding system in which terracotta is minimum 1-1/4 inch thick. Any non-open-joint installation technique such as ship-lap, etc. can be used. |
| Special Conditions | Use any header treatment shown in Figures 1 - 5 for all window and door openings in wall. |
| Flashing of window, door and other exterior wall penetrations | As an option, flash window, door and other exterior penetrations with either:<br>a) Dow LIQUIDARMOR™ - CM Flashing and Sealant – max. 60-mil wet thickness, max. 12-inch width.<br>b) Limited amounts of acrylic, asphalt or butyl-based flashing tape – max. 12-inch width. |

**W. R. MEADOWS, INC.** | P.O. Box 338 | HAMPSHIRE, IL 60140-0338
Phone:847/214-2100 | Fax:847/683-4544 | www.wrmeadows.com

QUALITY | SERVICE | INTEGRITY

W. R. MEADOWS®

A Family Company Since 1926

# NFPA MEADOWS SUMMARY

| WALLS CONTAINING THERMAX | |
|---|---|
| **Wall Component** | **Materials** |
| Base wall system - Use either 1, 2, 3, 4 or 5 | 1 – Concrete wall<br>2 – Concrete Masonry wall<br>3 – Standard clay brick wall<br>4 – Adobe block wall<br>5 – Steel studs: minimum 3⅝-inch depth, minimum 20-gauge at a maximum of 24-inch OC with lateral bracing every 4 ft. vertically with:<br>a) One layer – ⅝-inch thick Type X or ½-inch thick Type X Gypsum wallboard on interior face of studs, or<br>b) W.R. Grace's Monokote Z-3306 installed at a minimum of 3/8 inch thickness over cavity insulation (Item 2) or Thermax™, or<br>c) Isolatek International's CAFCO – TB 415 installed at a minimum of 3/8 inch thickness over cavity insulation (Item 2) or Thermax™, or<br>d) International Cellulose Corporation's Ure-K Thermal Barrier System installed at a minimum of 1.25 inch thickness over cavity insulation (Item 2) or Thermax™.<br>e) Specialty Products, Inc. Flame Seal-TB coating applied at a wet mil thickness of 25 mils (18 mils dry, 65 ft2/gal) over cavity insulation (Item 2)<br>f) International Fireproof Technology, Inc. DC 315 applied at an application rate of 18 wet mils applied over 4 mils of primer which is applied over cavity insulation (Item 2) |
| Floorline Firestopping | 4 lb/cu ft. mineral wool (e.g. Thermafiber) in each stud cavity and at each floorline – attached with Z-clips or equivalent |
| Cavity Insulation - Use either 1, 2 or 3 or combination of 2 & 3 | 1 – None<br>2 – Full stud depth or less thickness of DOW STYROFOAM™ Brand Spray Polyurethane CM 2060 or CM 2045 or CM 2030 applied using sheathing or insulation as substrate and covering the width of the cavity and inside the stud flange<br>3 – Fiberglass batt insulation (faced or unfaced) |
| Exterior sheathing - Use either 1, 2 or 3 | 1 – None<br>2 – ½-inch thick, exterior type gypsum sheathing<br>3 – ⅝-inch thick, exterior type gypsum sheathing |
| Air and Water-resistive barrier applied to gypsum sheathing | AIR-SHIELD LMP (Gray)<br>AIR-SHIELD LMP (Black)<br>AIR-SHIELD TMP<br>AIR-SHIELD LSR<br>AIR-SHIELD SMP<br>AIR-SHIELD ALUMINUM SHEET MEMBRANE |

| WALLS WITH A MAXIMUM OF 4.25" THICK THERMAX | |
|---|---|
| **Wall Component** | **Materials** |
| Exterior insulation - Use either 1, 2, 3 or 4 | 1 – None<br>2 – Dow Thermax™ Brand Rigid Insulation – Total thickness to be a minimum of ⅝ inch to maximum of 4.25 inches.<br>3 – DOW STYROFOAM™ Brand Spray Polyurethane CM 2060 or CM 2045 or CM 2030 – to a maximum of 3.5 inches thick.<br>4 – Combination of Item 2 and Item 3 – Total thickness of combination not to exceed 4.25 inches and thickness of Item 3 not to exceed 3.5 inches. |
| Weather-resistive barrier appled to exterior insulation Use either 1 or 2 | 1 – None<br>2 – WeatherMate™ or WeatherMate™Plus – Dow Chemical |

QUALITY | SERVICE | INTEGRITY
W. R. MEADOWS®
A Family Company Since 1926

# NFPA MEADOWS SUMMARY

| WALLS WITH A MAXIMUM OF 4.25" THICK THERMAX | |
|---|---|
| **Wall Component** | **Materials** |
| Flashing | Flash all exterior insulation joints and veneer tie penetrations with one of the following:<br>1 – Dow LIQUIDARMOR™ - CM Flashing and Sealant – max. 60-mil wet thickness, max. 5-inch width<br>2 – Dow WeatherMate™ Flashing – max. 4-inch width<br>3 – Asphalt or Butyl-based flashing tape – max. 4-inch width<br>Note: With either 2 or 3, a small amount of spray primer may be used to aid in adhesion; maximum 5-inch width |
| Exterior Veneer - Use 1, 2, 3, 4 and 5 | 1 – Brick – Brick veneer anchors – standard types – installed maximum 24 either inches OC vertically on each stud – Maximum 2-inch air gap between exterior insulation and brick – Standard nominal 4-inch thick, clay brick<br>2 – Stucco – Minimum ¾-inch thick, exterior cement plaster and lath. A secondary water-resistive barrier can be installed between the exterior insulation and the lath. The secondary water-resistive barrier shall not be full-coverage asphalt or butyl-based self-adhered membranes.<br>3 – Minimum 2-inch thick, Limestone or natural stone veneer or minimum 1-1/2 inch thick cast artificial stone veneer. Any standard non-open-joint installation technique such as ship-lap, etc., can be used.<br>4 – Terracotta cladding – Use any terracotta cladding system in which terracotta is minimum 1-1/4 inch thick. Any non-open-joint installation technique such as ship-lap, etc. can be used.<br>5 – Concrete or precast concrete panels – Minimum 1.5-inch thick panel, with a 2-inch maximum air gap between exterior insulation and concrete panel. Any standard non-open-joint installation technique such as ship-lap, etc. can be used. |
| Flashing of window, door, and other exterior wall penetrations | As an option, flash window, door and other exterior penetrations with either:<br>a) Dow LIQUIDARMOR™ – CM Flashing and Sealant – max. 60-mil wet thickness, max. 12-inch width.<br>b) Limited amounts of acrylic, asphalt or butyl-based flashing tape – max. 12-inch width. |

| WALLS WITH A MAXIMUM OF 3" THICK THERMAX | |
|---|---|
| **Wall Component** | **Materials** |
| Exterior Insulation - Use either 1 or 2 | 1 – None<br>2 – Dow Thermax™ Brand Rigid Insulation – Total thickness to be a minimum of ⅝ inch to maximum of 3 inches. |
| Flashing | Flash all exterior insulation joints and veneer tie penetrations with one of the following:<br>1 – Dow LIQUIDARMOR™ - CM Flashing and Sealant – max. 60-mil wet thickness, max. 5-inch width<br>2 – Dow WeatherMate™ Flashing – max. 4-inch width<br>3 – Asphalt or Butyl-based flashing tape – max. 4-inch width<br>Note: With either 2 or 3, a small amount of spray primer may be used to aid in adhesion; maximum 5-inch width |

# NFPA MEADOWS SUMMARY

| WALLS WITH A MAXIMUM OF 3” THICK THERMAX | |
|---|---|
| **Wall Component** | **Materials** |
| Exterior Veneer - Use either 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11,12 or 13 | 1 – MCM System - 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.<br>2 – Terracotta cladding – Use any terracotta cladding system in which terracotta is minimum 1-1/4 inch thick. Any standard installation technique can be used.<br>3 – Metal exterior wall coverings such as steel, aluminum, copper, etc. Any standard installation technique can be used.<br>4 – Cement board siding – Any standard installation technique can be used.<br>5 – Brick - Standard nominal 4-inch thick, clay brick with brick veneer anchors – standard types – installed maximum 24 inches OC vertically on each stud. Maximum 2-inch air gap between exterior insulation and brick.<br>6 – Stucco – Minimum ¾-inch thick, exterior cement plaster and lath. A secondary water-resistive barrier can be installed between the Exterior insulation and the lath. The secondary water-resistive barrier shall not be full-coverage asphalt or butyl-based self-adhered membranes.<br>7 – Corium™ Thin brick system.<br>8 – Minimum 1¼-inch thick, Limestone or natural stone veneer or minimum 1¼ inch thick cast artificial stone veneer. Any standard installation technique such as ship-lap, etc. can be used.<br>9 – StoneLite natural stone wall panels by Stone Panels, Inc.<br>10 – Glen-Gery Thin Tech Elite Series – Masonry veneer<br>11 – Concrete or precast concrete panels – Minimum 1.5-inch thick panel, with a 2-inch maximum air gap between exterior insulation and concrete panel. Any standard installation technique can be used.<br>12 – Ceramic tile (min. 3/8-in. thick) bonded using noncombustible mortar adhesive to minimum ½-in. thick cement board or gypsum sheathing.<br>13 – Knight Wall Systems to include:<br>• Metal Panel (Aluminum or steel)<br>• Thin Brick Panels<br>• NuTech AFC Stucco applied to Permabase cement board<br>• Terracotta – Single skin or double skin – 15 mm or thicker<br>• Concrete panels<br>• Corium™ Thin Brick system<br>• Thin brick (min. ¾-inch thick clay brick) fully adhered with cementitious mortar (standard or pllymer modified) to min. ½-inch thick cement backer board or gypsum sheathing. A secondary water-resistive barrier can be installed between the board/ sheathing and the brick. The secondary water-resistive barrier shall not be full-coverage asphalt or butyl-based self-adhered membranes.<br>• Natural stone or artificial stone (min. ¾-inch thick clay brick) fully adhered with cementitious mortar (standard or pllymer modified) to min. ½-inch thick cement backer board or gypsum sheathing. A secondary water-resistive barrier can be installed between the board/sheathing and the stone. The secondary water-resistive barrier shall not be full-coverage asphalt or butyl-based self-adhered membranes. |
| Flashing of window, door and other exterior wall penetrations | As an option, flash window, door and other exterior penetrations with either:<br>a) Dow LIQUIDARMOR™ – CM Flashing and Sealant – max. 60-mil wet thickness, max. 12-inch width.<br>b) Limited amounts of acrylic, asphalt or butyl-based flashing tape – max. 12-inch width. |