

# NFPA 285 ASSEMBLY GUIDE

RMAX THERMASHEATH®

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Rmax Thermasheath® passes the stringent NFPA 285 test within numerous assembly configurations and is approved for use in exterior walls of buildings of any height. This document briefly describes approved options, however, for more specific details, requirements and limitations, refer to third party reports. NFPA 285 is an assembly test and substitution of components is not allowed.

**Table 1: Approved Components for NFPA 285 Assemblies**

WALL COMPONENT	MATERIALS								
<b>Base Wall</b>	<ul style="list-style-type: none"> <li>Steel studs (3 5/8" 20GA min, 24" o.c. max) with Type X interior gypsum wallboard (1/2" min)</li> <li>Concrete or concrete masonry wall</li> <li>FRTW<sup>1</sup> studs (nominal 2x4 min, 24" o.c. max) with 5/8" Type X interior gypsum wallboard</li> </ul>								
<b>Floor Line Fire-Stopping</b>	<ul style="list-style-type: none"> <li>Mineral fiber insulation (4 pcf)</li> <li>FRTW<sup>1</sup> fire blocking</li> </ul>								
<b>Cavity Insulation</b>	<ul style="list-style-type: none"> <li>None</li> <li>Mineral fiber or fiberglass (faced or unfaced)</li> <li>Any non-combustible insulation</li> <li>Various SPF (requires 5/8" exterior gypsum)</li> </ul>								
<b>Exterior Sheathing</b>	<ul style="list-style-type: none"> <li>None (only with concrete or concrete masonry walls)</li> <li>Exterior gypsum sheathing (1/2" min)</li> <li>FRTW<sup>1</sup> structural panels (1/2" min)</li> <li>Soprema® SOPRASEAL® Xpress G<sup>2</sup></li> </ul>								
<b>WRB Over Sheathing</b>	<ul style="list-style-type: none"> <li>None</li> <li>Any WRB in Table 2 (Group 1, 2 or 3)</li> </ul>								
<b>Exterior Insulation</b>	<ul style="list-style-type: none"> <li>Thermasheath® (4.5" max)</li> </ul>								
<b>WRB Over Insulation</b>	<ul style="list-style-type: none"> <li>Any WRB in Table 2, Group 3</li> <li>Any WRB in Table 2, Group 2 (claddings 1-6)</li> </ul>								
<b>Exterior Cladding Options 1-6</b>	<table border="0"> <tr> <td>1. Brick, standard 4" clay brick with max 2" air gap</td> <td>3. Limestone (2" min)</td> </tr> <tr> <td>2. Stucco, cement plaster (3/4" min) and lath with optional secondary WRB (not asphaltic or self-adhered butyl)</td> <td>4. Natural stone veneer (2" min)</td> </tr> <tr> <td></td> <td>5. Cast artificial stone veneer (1 1/2" min)</td> </tr> <tr> <td></td> <td>6. Terracotta cladding (1 1/4" min)</td> </tr> </table>	1. Brick, standard 4" clay brick with max 2" air gap	3. Limestone (2" min)	2. Stucco, cement plaster (3/4" min) and lath with optional secondary WRB (not asphaltic or self-adhered butyl)	4. Natural stone veneer (2" min)		5. Cast artificial stone veneer (1 1/2" min)		6. Terracotta cladding (1 1/4" min)
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<b>Window Headers</b>	<ul style="list-style-type: none"> <li>Steel flashing (20GA min)</li> </ul>								
<b>Flashing</b>	<ul style="list-style-type: none"> <li>Any asphalt, acrylic or butyl based (12" max)</li> <li>Any liquid applied (12" max)</li> </ul>								

<sup>1</sup>Fire Retardant Treated Wood (FRTW), where allowed, must comply with IBC Section 2303.2.

<sup>2</sup>No additional WRB over sheathing.

**NOTE:** For additional details of each component and confirmation of approved assembly, refer to DrJ Technical Evaluation Report ([www.rmax.com](http://www.rmax.com)) or Fire Analysis Summary from Priest & Associates.



**Table 2: Water Resistive Barriers (WRBs) Approved for Use in Rmax NFPA 285 Assemblies**

GROUP 1 WRB Over Sheathing (all claddings) Sheathing = gypsum or FRTW applied direct to studs, prior to Thermasheath®		
SELF ADHERED	FLUID APPLIED	
Dörken Systems: DELTA®-STRATUS SA	BASF: MasterSeal® AWB 660	NaturaSeal: AirSeal NS-A250-HP
Dörken Systems: DELTA®-VENT SA	BASF: MasterSeal® AWB 660 I	NaturaSeal: AirSeal NS-A250-HP
Henry®: Blueskin® SA	GCP: PERM-A-BARRIER® NPL 10	Sika: SikaGard®-530
SOPREMA®: SOPRASEAL® Stick 1100T	GCP: PERM-A-BARRIER® VPL 50 Membrane	SOPREMA®: SOPRASEAL® LM 204 VP
	Henry®: Air-Bloc® 32MR	
GROUP 2 WRB Over Sheathing (all claddings), WRB Over Insulation (claddings 1-6) Sheathing = gypsum or FRTW applied direct to studs, prior to Thermasheath®; Insulation = Thermasheath®		
SELF ADHERED	FLUID APPLIED	
GCP: PERM-A-BARRIER® VPS	Carlisle: Fire Resist Barritech NP™	Pecora: ProPerm VP
Henry®: EnviroCap	Carlisle: Fire Resist Barritech VP	Pecora: XL-Perm <sup>ULTRA</sup> NP
Henry®: Blueskin® VP160	Dow®: DOWSIL™ DEFENDAIR 200	Pecora: XL-Perm <sup>ULTRA</sup> VP (10 mil DFT)
SIGA: Majvest® 500 SA	Dow®: DOWSIL™ DEFENDAIR 200C	PROSOCO: R-Guard® Cat 5™
SOPREMA®: SOPRASEAL® Stick VP	Dryvit®: Backstop® NT™	PROSOCO: R-Guard® VB
VaproShield®: RevealShield SA®	GCP: PERM-A-BARRIER® VPL	PROSOCO: R-Guard® Spray Wrap
VaproShield®: WrapShield SA®	GCP: PERM-A-BARRIER® VPL LT	PROSOCO: R-Guard® Spray Wrap MVP
W.R. Meadows®: AIR-SHIELD SMP	Henry®: Air-Bloc® 17	Sika: SikaGard®-535
	Henry®: Air-Bloc® 21FR	W.R. Meadows®: AIR-SHIELD LMP (Black)
	Henry®: Air-Bloc® 31MR	W.R. Meadows®: AIR-SHIELD LMP (Gray)
	Henry®: Air-Bloc® 33MR	W.R. Meadows®: AIR-SHIELD LSR
	Parex USA: WeatherSeal Spray & Roll-On	W.R. Meadows®: AIR-SHIELD TMP
MECHANICALLY ATTACHED		
Dörken Systems: DELTA®-FASSADE S	Dörken Systems: DELTA®-MAXX PLUS	Henry®: Super Jumbo Tex® 60 Minute <sup>1</sup>
Dörken Systems: DELTA®-FOXX PLUS	Dörken Systems: DELTA®-VENT S PLUS	Henry®: WeatherSmart® Drainable
GROUP 3 WRB Over Sheathing (all claddings), WRB Over Insulation (all claddings) Sheathing = gypsum or FRTW applied direct to studs, prior to Thermasheath®; Insulation = Thermasheath®		
SELF ADHERED	FLUID APPLIED	MECHANICALLY ATTACHED
Carlisle: Fire Resist 705FR-A	PROSOCO: R-Guard® Spray Wrap MVP	DuPont™: Tyvek® (various per ESR-2375)
GCP: PERM-A-BARRIER® Aluminum Wall Membrane		DuPont™: WEATHERMATE™
Henry®: FOILSKIN		DuPont™: WEATHERMATE™ Plus
Henry®: Blueskin® Metal Clad®		Kingspan: GreenGuard® MAX™ Building Wrap
SOPREMA®: SOPRASOLIN HD		

**NOTE:** For additional details of each component and confirmation of approved assembly, refer to Fire Analysis Summary from Priest & Associates.

<sup>1</sup>Use over insulation is limited to stucco only.

**For warranties, limitations and conditions refer to the Rmax Sales Policy and applicable warranties. All documents are located at [www.rmax.com](http://www.rmax.com). For technical support, email [technical@rmax.com](mailto:technical@rmax.com). For sales support, pricing and availability, email [rmax@rmax.com](mailto:rmax@rmax.com) or call (800) 527-0890.**