

# NFPA 285 ASSEMBLY GUIDE

## RMAX ECOMAXci™, TSX-8500 and TSX-8510

Rmax ECOMAXci™, TSX-8500 and TSX-8510 pass the stringent NFPA 285 test within numerous assembly configurations and are 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> </ul>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <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 (concrete or concrete masonry wall)</li> <li>None (4 1/2" max exterior insulation claddings 1-6)</li> <li>None (3" max exterior insulation claddings 7-14)</li> </ul>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Any WRB in Table 2 (Group 1, 2 or 3)</li> </ul>
<b>Exterior Insulation</b>	<ul style="list-style-type: none"> <li>ECOMAXci™ (4.5" max)</li> </ul>	<ul style="list-style-type: none"> <li>TSX-8500 or TSX-8510 (4.5" max)</li> </ul>
<b>FRTW Structural Panels Over Insulation</b>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>FRTW<sup>1</sup> structural panels installed in accordance with applicable code requirements. May be pre-laminated to insulation.</li> </ul>
<b>WRB Over Exterior Insulation (or FRTW)</b>	<ul style="list-style-type: none"> <li>None</li> <li>Any WRB in Table 2, Group 3</li> <li>Any WRB in Table 2, Group 2 (claddings 1-6)</li> </ul>	<ul style="list-style-type: none"> <li>R-SEAL 3000 over insulation joints (6" max)</li> <li>Any liquid applied, butyl or asphalt based tape over insulation joints (6" max) - confirm with manufacturer for tested WRB</li> </ul>
<b>Exterior Cladding Options 1-6</b>	<ul style="list-style-type: none"> <li>Brick, standard 4" clay brick with max 2" air gap</li> <li>Stucco, cement plaster (3/4" min) and lath with optional secondary WRB (not asphaltic or self-adhered butyl)</li> </ul>	<ul style="list-style-type: none"> <li>Limestone (2" min)</li> <li>Natural stone veneer (2" min)</li> <li>Cast artificial stone veneer (1 1/2" min)</li> <li>Terracotta cladding (1 1/4" min)</li> </ul>
<b>Exterior Cladding Options 7-14</b>	<ul style="list-style-type: none"> <li>Any MCM (aluminum, steel, copper, zinc) passing NFPA 285 with max 2 1/2" air gap</li> <li>Metal panel, uninsulated (aluminum, steel, copper, zinc)</li> <li>Fiber-cement siding, uninsulated</li> <li>Autoclaved-aerated-concrete (AAC) panels passing NFPA 285</li> </ul>	<ul style="list-style-type: none"> <li>Stone/aluminum honeycomb composite building panels passing NFPA 285                             <ul style="list-style-type: none"> <li>Stone Panels, Inc. StoneLite® panel system</li> </ul> </li> <li>Thin set brick                             <ul style="list-style-type: none"> <li>Glen-Gery Thin Tech® - Elite Series</li> </ul> </li> <li>Natural stone veneer, adhered (1 1/4" min)</li> <li>FunderMax M.Look with max 1 1/2" air gap</li> </ul>
<b>Window Headers</b>	<ul style="list-style-type: none"> <li>Aluminum flashing (0.08" min)</li> </ul>	<ul style="list-style-type: none"> <li>Steel flashing (20GA min)</li> </ul>
<b>Flashing</b>	<ul style="list-style-type: none"> <li>R-SEAL 6000 (12" max)</li> <li>Any asphalt, acrylic or butyl based (12" max)</li> </ul>	<ul style="list-style-type: none"> <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 or Fire Analysis Summary from Priest & Associates.

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

GROUP 1 (Over Sheathing for All Claddings)		
SELF ADHERED	FLUID APPLIED	
Henry®: Blueskin® SA	BASF: Enershield®-HP	Sika SikaGard 530
Henry®: BlueskinVP™ 160	BASF: Enershield®-I	Soprema: SOPRASEAL LM 204 VP
Soprema®: SOPRASEAL®Stick 1100T	Henry®: Air-Bloc® 32MR	W.R. Grace: PAB®NPL 10
		W.R. Grace: PAB® VPL 50
GROUP 2 (Over Sheathing for All Claddings or Over Insulation for Claddings 1-6)		
SELF ADHERED	FLUID APPLIED	
Henry®: EnviroCap	Carlisle: Fire Resist Barritech™ NP	PROSOCO: R-Guard® Cat 5®
Siga: Majvest 500 SA	Carlisle: Fire Resist Barritech™ VP	PROSOCO: R-Guard® VB
Soprema®: SOPRASEAL® Stick VP	Dryvit®: Backstop® NT™	W.R. Grace: PAB® VPL
VaproShield®: RevealShield SA™	Henry®: Air-Bloc® 17MR	W.R. Grace: PAB® VPL LT
VaproShield®: WrapShield SA®	Henry®: Air-Bloc® 21FR	WR Meadows: Air-Shield LMP (Gray)
W.R. Grace: PAB®VPS	Henry®: Air-Bloc® 31MR	WR Meadows: Air-Shield LMP (Black)
	Henry®: Air-Bloc® 33MR	WR Meadows: Air-Shield TMP
	Pecora: XL-Perm <sup>ULTRA</sup> VP (10 mil DFT)	WR Meadows: Air-Shield LSR
GROUP 3 (Over Sheathing or Over Insulation for All Claddings)		
SELF ADHERED	FLUID APPLIED	MECHANICALLY ATTACHED
Carlisle: Fire Resist 705FR-A	PROSOCO: Spray Wrap MVP	Pactiv: GreenGuard® MAX™ Building Wrap
Henry®: FOILSKIN®		Dow: WEATHERMATE™
Henry®: Metal Clad		Dow: WEATHERMATE™ Plus
Soprema®: Soprasolin® HD		DuPont: Tyvek® (various per ESR-2375)
W.R. Grace: PAB® AWM		
<b>NOTE: For additional details of each component and confirmation of approved assembly, refer to DrJ Technical Evaluation Report or Fire Analysis Summary from Priest &amp; Associates.</b>		

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