

NFPA 285 ASSEMBLY GUIDE

RMAX ECOMAXCI® FR

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Rmax ECOMAXci® FR 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 OPTIONS	
Base Wall	<ul style="list-style-type: none"> Steel studs (3 5/8" 20GA min, 24" o.c. max) with Type X interior gypsum wallboard (1/2" min) Concrete or concrete masonry wall FRTW¹ studs (nominal 2x4 min, 24" o.c. max) with 5/8" Type X interior gypsum wallboard 	
Floor Line, Fire-Stopping	<ul style="list-style-type: none"> Mineral fiber insulation (4 pcf) FRTW¹ fire blocking 	
Cavity Insulation	<ul style="list-style-type: none"> None Mineral fiber or fiberglass (faced or unfaced) Any non-combustible insulation Various SPF (requires 5/8" exterior gypsum) 	
Exterior Sheathing	<ul style="list-style-type: none"> None (concrete or concrete masonry wall) None (4 1/2" max exterior insulation claddings 1-6) None (3" max exterior insulation claddings 7-14) Exterior gypsum sheathing (1/2" min) FRTW¹ structural panels (1/2" min) Soprema® SOPRASEAL® Xpress G² 	
WRB Over Sheathing	<ul style="list-style-type: none"> None Any WRB in Table 2 (Group 1, 2 or 3) 	
Exterior Insulation	<ul style="list-style-type: none"> ECOMAXci® FR (4.5" max) 	
FRTW Structural Panels Over Insulation	<ul style="list-style-type: none"> None FRTW¹ structural panels installed in accordance with applicable code requirements. May be pre-laminated to insulation 	
WRB Over Exterior Insulation (or FRTW)	<ul style="list-style-type: none"> None Any WRB in Table 2, Group 3 Any WRB in Table 2, Group 2 (claddings 1-6) R-SEAL 3000 over insulation joints (6" max) Any liquid applied, butyl or asphalt based tape over insulation joints (6" max) - confirm with manufacturer for tested WRB 	
Exterior Cladding Options 1-6	<ol style="list-style-type: none"> Brick, standard 4" clay brick with max 2" air gap Stucco, cement plaster (3/4" min) and lath with optional secondary WRB (not asphaltic or self-adhered butyl) 	<ol style="list-style-type: none"> Limestone (2" min) Natural stone veneer (2" min) Cast artificial stone veneer (1 1/2" min) Terracotta cladding (1 1/4" min)
Exterior Cladding Options 7-14	<ol style="list-style-type: none"> Any MCM (aluminum, steel, copper, zinc) passing NFPA 285 with max 2 1/2" air gap Metal panel, uninsulated (aluminum, steel, copper, zinc) Fiber-cement siding, uninsulated Autoclaved-aerated-concrete (AAC) panels passing NFPA 285 	<ol style="list-style-type: none"> Stone/aluminum honeycomb composite building panels passing NFPA 285 <ul style="list-style-type: none"> - Stone Panels, Inc. StoneLite® panel system Thin set brick <ul style="list-style-type: none"> - Glen-Gery Thin Tech® - Elite Series Natural stone veneer, adhered (1 1/4" min) FunderMax M.Look with max 1 1/2" air gap
Window Headers	<ul style="list-style-type: none"> Aluminum flashing (0.08" min) Steel flashing (20GA min) 	
Flashing	<ul style="list-style-type: none"> R-SEAL 6000 (12" max) Any asphalt, acrylic or butyl based (12" max) Any liquid applied (12" max) 	

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

²No additional WRB over sheathing.

NOTE: For additional details of each component and confirmation of approved assembly, refer to DrJ Technical Evaluation Report, TER 1309-03 (www.rmax.com) 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	
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 (Over Sheathing for All Claddings or Over Insulation for Claddings 1-6)		
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 ^{ULTRA} NP
Henry®: Blueskin® VP160	Dow®: DOWSIL™ DEFENDAIR 200	Pecora: XL-Perm ^{ULTRA} 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 ¹
Dörken Systems: DELTA®-FOXX PLUS	Dörken Systems: DELTA®-VENT S PLUS	Henry®: WeatherSmart® Drainable
GROUP 3 (Over Sheathing or Over Insulation for All Claddings)		
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.

¹Use over insulation is limited to stucco only.

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