

HARDSTOP® DECORATIVE PROTECTION PANELS

MAXIMUM DURABILITY, ENDLESS STYLE

HardStop® Decorative Protection Panels by Formica Group. An excellent solution for high-performance wall panels, HardStop® blends ease of installation and impact resistance with a full range of design selections that coordinate perfectly with other Formica® Brand Laminates. Unlike traditional laminate that contains a paper core, HardStop® Panels features a treated fiberglass core for added durability, strength and fire resistance.

HARDSTOP® DECORATIVE PROTECTION PANELS FEATURE:

- High impact resistance
- Class A fire rating
- Scratch, stain and water resistance (EliteForm[™] technology)
- Chemical resistance
- Ease of maintenance and installation
- Can be applied directly to many substrates with proper adhesive including drywall
- Color variety: Available in all Formica®
 Brand colors
- Versatility: Coordinate with other Formica®
 Brand Laminate
- Multiple options for seam treatment
- Short lead time
- High dimensional stability

THE HARDSTOP® DIFFERENCE

Most wall protection products on the market today fall short when it comes to scratch resistance, fire resistance, ease of installation and/or design aesthetic. But not HardStop® Decorative Protection Panels. HardStop® delivers best in class performance qualities with exceptional design.

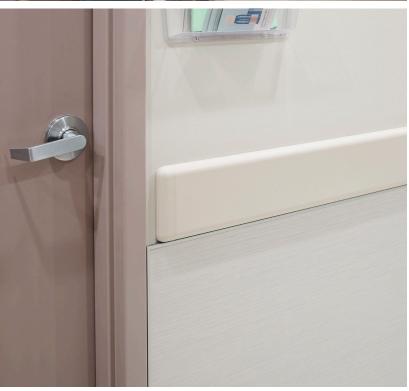
TARGET MARKETS

- Healthcare
- Education
- Hospitality
- Retail
- Office
- Transportation
- Mass Transit

COMMON APPLICATIONS

Wainscot, wall panels, column wraps, elevator cabs, room dividers, doors, cabinet fronts, counter/desk/bar fronts, backsplash, counters, tops, etc.







HARDSTOP® DECORATIVE PROTECTION PANELS

PHYSICAL PROPERTIES OF HARDSTOP® DECORATIVE PROTECTION PANELS:

PHYSICAL PROPERTIES	TEST	HARDSTOP® PANELS
	NEMA LD3 2005	
Light Resistance	3.3	No effect
Cleanability	3.4	14
Stain Resistance	3.4	
Reagents 1-10		No effect
Reagents 11-15		No effect
Boiling Water Resistance	3.5	No effect
High Temperature Resistance	3.6	No effect
Ball Impact Resistance	3.8	
-in		53
-mm		1350
Radiant Heat Resistance Coil Method	3.1	>600 sec.
Coil Method		
Room Temp. Dimensional Change	3.12	
Machine Direction - %		0.05%
Cross Direction - %		0.05%
Wear Resistance - cycles	3.13	700

PHYSICAL PROPERTIES	TEST	HARDSTOP® PANELS
Water Absorption	ASTM D570	1.78%
Thermal Expansion	ASTM D696	2.0 x 10 -5/°C
Barcol Hardness	ASTM D2583	72
Anti-bacterial	ASTM G22	Pass
Chemical Resistance	SEFA 8.1	Pass

CODES & CERTIFICATIONS	
Greenguard Gold	Approved
IMO Certified	Approved

FIRE RESISTANT PROPERTIES	TEST	HARDSTOP® PANELS		
Steiner Tunnel Test	Class ASTM E84 A	Flame	Smoke	
		0	40	
	UL723	0	70-95	
	ULC 102	0	40	
Surface Flammability	ASTM E162	1		
Smoke Density	ASTM E662	Flamming Ds(1.5) 9		9
		Flamming	g Ds(4.0)	31
		Non-Flan	nming Ds(1.5)	0
		Non-Flan	nming Ds(4.0)	9
Federal Motor Vehicle Safety	FMVSS 302	Pass		
Cone Calorimeter	ISO 5660	Peak HR	R 20 kW/m2	
		Total Sm	oke 112 m2/m	2
		Average	THR 11.5 MJ/r	m2
		THR 5	min 0.8 MJ/m	12
		THR 1	0 min 5.0 MJ/	m2
		THR 2	0 min 11.5 MJ	/m2

MECHANICAL PROPERTIES	ASTM TEST	HARDSTOP® PANELS
Flexural Strength	D790	
Ultimate	Machine Direction	112 MPa
	Cross Direction	99 MPa
Modulus	Machine Direction	18,000 MPa
	Cross Direction	17,000 MPa

PRODUCT AVAILABILITY

GRADE	TYPICAL THICKNESS	FINISH	SIZE
H1	.0677"-0.087"	-58	4'x8'; 4'x10'
	(1.72mm-2.1mm)	Matte	(not oversized)
H1	.0677"-0.087"	-43	4'x8'; 4'x10'
	(1.72mm-2.1mm)	Artisan™	(not oversized)

NOTE: -58 Matte finish on any color;

-43 Artisan™ on select colors. -NG Natural Grain on Solids and Woodgrains.

CERTIFICATIONS

ANSI/NEMA LD3-2005 Compliant GreenGuard Gold Indoor Air Quality Certified® Class 1/A Fire-rated (UL723/ASTM E-84) SEFA 8.1 approved ASTM G22 Bacterial Growth Resistance IMO certified

^{*}All MTO in any Formica® Brand Color / 10 day production lead time + transit

^{*}Minimum order—Four two-sided panels

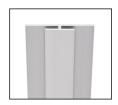
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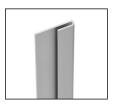
HARDSTOP® SEAM TREATMENTS

HardStop® Panels can be installed using our selection of seam treatments. Formica Group offers a variety of anodized aluminum trims that come in five profiles for any application: AT10 Inside Corner, AT20 Outside Corner, AT30 Division Bar, and AT40 End Cap.







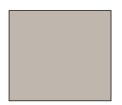


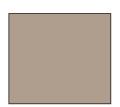
AT10 Inside Corner

AT20 Outside Corner AT30 Division Bar

AT40 End Cap

All trim profiles are available in four anodized colors: 100 Clear Anodized, 101 Champagne, 103 Dark Bronze, and 104 Black. **Note:** Due to the aluminum properties, slight color variations from batch to batch can be expected.









100 Clear Anodized

101 Champagne

103 Dark Bronze

104 Black

Color coordinated 100% silicone caulk can also be used as seam treatments. Color Rite Inc.™ caulk is recommended. A Formica® Brand colors and Color Rite caulk cross reference guide is available on www.formica.com.

HOW TO SPECIFY HARDSTOP® PANELS

Surface shall be HardStop® Decorative Protection Panelsfrom Formica Corporation, Cincinnati OH. Division: 6, 9 or 10

COLOR #
OLOR NAME
RADE H1
INISH
SIZE

HOW TO SPECIFY HARDSTOP® ALUMINUM TRIM

Trim shall be HardStop® Aluminum Trims from Formica Corporation, Cincinnati, OH.

PROFILE	
LENGTH	
COLOR_	