

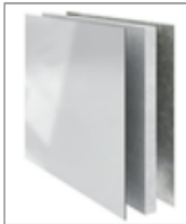
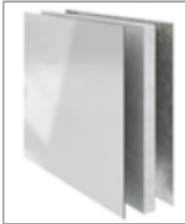

High Performance Decorative Panels



Nudo CeramicSteel™ Technical Data

Nudo CeramicSteel™ panels combine porcelain enameled steel surface with composite substrate to meet your application requirements. NUDO CeramicSteel panels are offered in a selection of colors and finishes, with (3) substrates to choose from: High Density Fiberboard (HDF), Aluminum Composite (ACM) and Cement Board (CB). The panels are great for high traffic environments in both new construction and renovation projects such as Lobbies, Corridors, Hospitals, Airports, Sports Venues, Convention Centers, or Escalator Cladding.

Size and Panel Composition: Table 1

Panel Substrate	High Density Fiberboard (HDF)		Cement Board (CB)		Aluminum Composite (ACM)		Colors
Nominal Size	4'X8'	4'X10'	4'X8'	4'X10'	4'X8'	4'X10'	Bone White (7563) White (6100L-WS) New White (PEI-N-52) Stone White (PEI-118) Ivory (PEI-14) Stone Gray (513) Powder Gray (PEI-22) Matte Black (TCM-14) Black Chalkboard (6501-C-WS) Glossy White (6100H-WS) Glossy Black (PEI-28-WS) (Custom Colors and Graphics Available)
Actual Size	47 3/4"X95 3/4"	47 3/4"X119 3/4"	47 3/4"X95 3/4"	47 3/4"X119 3/4"	47 3/4"X95 3/4"	47 3/4"X119 3/4"	
Nominal Thickness	1/4"		1/4"		1/4"		
Approximate Weight (lbsf)	2.5#		2.6#		2.6#		
Fire Rating	Class A		Class A		Class A		
Image							

Note: Not all colors are stock, and minimums may apply.

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Surface Technical Properties Table 2

Property	High Density Fiberboard (HDF)	Cement Board (CB)	Aluminum Composite (ACM)	Test Method
Pencil Hardness	>9h	>9h	>9h	ASTM D3363
Wear Resistance	Max 0.1g	Max 0.1g	Max 0.1g	ASTM C501
Color Stability	$\Delta F^{94} \leq 5(24h)$	$\Delta F^{94} \leq 5(24h)$	$\Delta F^{94} \leq 5(24h)$	ASTM C538
Reflectance	Y-Value up to 93%	Y-Value up to 93%	Y-Value up to 93%	ASTM D2244
Scratch Resistance	Min 7N	Min 7N	Min 7N	ISO 15695
Graffiti Resistance	No color or gloss change after cleaning	No color or gloss change after cleaning	No color or gloss change after cleaning	ISO 28722
UV Resistance	$\Delta F^{94} \leq 5(2000h)$	$\Delta F^{94} \leq 5(2000h)$	$\Delta F^{94} \leq 5(2000h)$	ISO 4892
Impact Resistance	No damage over 2mm after 24 h (20 N load)	No damage over 2mm after 24 h (20 N load)	No damage over 2mm after 24 h (20 N load)	ISO 4532
Cold Acid Resistance	Min Class A	Min Class A	Min Class A	ISO 28706-1
Boiling Acid	Max 18.5 g/m ²	Max 18.5 g/m ²	Max 18.5 g/m ²	ISO 28706-2
Orange Peel	SW ≤ 55 ; LW ≤ 25 Distinctness of image ≥ 60	SW ≤ 55 ; LW ≤ 25 Distinctness of image ≥ 60	SW ≤ 55 ; LW ≤ 25 Distinctness of image ≥ 60	ASTM D523
Flame Spread	A / 1	A / 1	A / 1	ASTM E84

Typical Applications: Nudo CeramicSteel™ is an interior panel great for high traffic environments in both new construction and renovation projects such as Lobbies, Corridors, Hospitals, Airports, Sports Venues, Convention Centers, or Escalator Cladding.

Features: The porcelain enamel finish comes in eleven standard colors, custom colors, and are also available with graphics. The porcelain enamel finish is protected by a film that pulls away when ready for use. CeramicSteel is available with three different substrates to meet the needs of most installations. CeramicSteel's nonporous surface protects against graffiti and staining. The CeramicSteel panel is a colorfast panel that is also scratch, impact, chemical, bacteria, and fire resistant that can be cleaned easily with water or solvent with a long-life cycle.

Cut to Size: Nudo CeramicSteel™ can be ordered in sizes cut to user provided dimensions. Nudo Products, Inc. offers optimization services but does not calculate taken offs.

Tolerances:

- Thickness: +/- 1/16"
- Width: +0", - 1/8"
- Length: +0", - 1/8"
- Squareness: +/- 1/4"
- Edge Tolerance: +/- 1/8" (porcelain can hang off the edge of the panel by edge or back of the panel edge by 1/8")



Nudo CeramicSteel™

Storage: Nudo CeramicSteel™ panels should always be stored flat on a smooth surface above the ground. A pallet with a smooth piece of plywood beneath the panels is best to avoid any warping or waviness. As with most building products, it is best to acclimate the panel on site 48 hours before installation. Although the panels are moisture resistant, be sure panels are kept dry prior to installation to ensure water is not trapped under the protective film.

Handling: Although CeramicSteel panels are rigid and have good impact resistance, the porcelain enamel faces can be scratched or dented if not handled properly. Do not drop or bump the panel on its edges as this may cause unwanted bending of the aluminum. Do not slide the panel edges or face over rough surfaces that may cause bending or scratching. Pick panels up when handling as compared to sliding panels across each other. Sliding panels may cause scratches on one or both faces.

Fabrication: Use protective eyewear such as goggles or safety glasses, cover your nose and mouth with a filter mask when cutting CeramicSteel.

Field Cutting: NUDO Ceramicsteel panels can be cut under field conditions. The following procedures should be followed in order to achieve satisfactory results.

Length & Width Cuts: Cuts can be made using various types of cutting saws, for example the Kett Master Saw Model KSV- 33AM, or similar model manufactured by the Kett® Tool Company (513) 271- 0333. A 2" X 60-tooth (part no.157-60) or 2-1/2" X 60-tooth (part no.157-66) blade should be used in order to achieve satisfactory cutting results. Cuts can also be made using at standard 7-1/4" X 5/8" arbor circular saw with a 24 or 40- tooth carbide tipped blade (similar to Hilti® model SB-CC #93826).

The panels should be cut with the finish side up. Cuts should be made with the protective poly film still on the finish. If the film has been removed, apply a strip of masking tape to the area being cut in order to minimize chipping. Blade wax can be used for lubrication, blade lubricating oils are not recommended. Metal burrs left after cutting can be removed with a file.¹

Penetration Cuts: Circular penetrations can be made using a standard high-speed drill and metal cutting blade. All penetrations should be made with the finish side up, through the protective polyfilm covering. If the film has been removed, apply a strip of masking tape to the area being drilled. Square penetrations for light switches and electrical outlets can be made by drilling a pilot hole and cutting with a jig saw using a metal cutting blade with 14 TPI (teeth per inch). Blade wax can be used for lubrication, blade lubricating oils are not recommended. Metal burrs left after cutting can be removed with a file.

Note: The type of core material being cut, not the Ceramicsteel, determines the number of cuts which can be obtained from a single saw blade. Typically, panels with gypsum and mineral fiber cement board cores tend to dull blades faster than panels with wood fiber cores such as particle board and hardboard. Care should always be taken to use sharp saw blades in order to obtain the best possible results. All Cut Edges of panels must be sealed with silicone or other sealant and/or covered by a trim.

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Warranty: CeramicSteel has a five (5) Year Limited Warranty on the panel construction and (10) year Limited Warranty of the porcelain enameled surface.

Cleaning & Maintenance: The CeramicSteel panel requires almost no maintenance. If the surface does need to be cleaned, use a mild cleaning detergent with water.



Disclaimer: We believe all information given is accurate. It is offered in good faith, but without guarantee. Since conditions of use are beyond our control, the user assumes all risks. Nothing herein shall be construed as a recommendation for use that infringes on valid patent or as extending a license under valid permit.

