

# Marine Panel Systems

## Stainless Steel Decking & Deep-Textured Metals





# Naval

## Certified Choice

Certified Rigidized<sup>®</sup> Metals C-Class IMO Honeycomb Panels are approved as meeting Part 1 of Annex 1 of the IMO FTP Code with the adhesive meeting Part 5 of Annex 1 of the IMO FTP Code.

- Choice of panel skins and honeycomb thickness.
- Rigidized<sup>®</sup> Metals Textures in Aluminium and Stainless Steel.
- Made in the USA.
- Weight, strength and corrosion resistance are common requirements in these industries and Rigidized<sup>®</sup> Metals panels meet the requirements and exceed expectations.
- Rigidized<sup>®</sup> Metals skins reduce weight while maintaining dent and scuff resistance. The textured surface also diffuses light to reduce glare on these bright metal surfaces.
- Using Rigidized<sup>®</sup> Metals skins with an aluminum honeycomb core creates an extremely strong but lightweight panel. Mechanical section properties can be controlled with both skin gauge and core thickness.

# IMO CERTIFIED

# Custom Laminated Panels

Our lightweight composite panels meet the most demanding requirements of IMO and the USCG for use in:

- bulkheads
- ceilings
- sanitary partitions
- floors

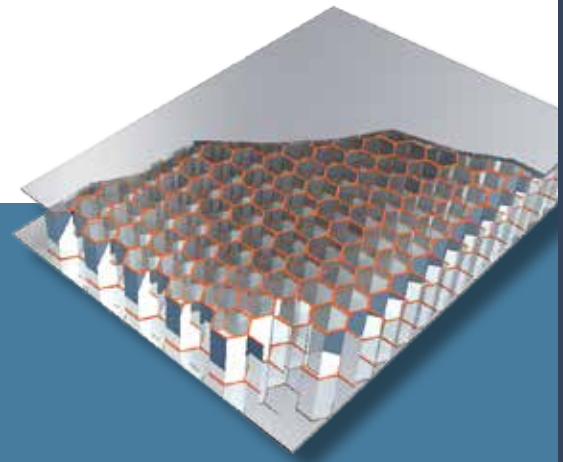
Rigidized® Metals can supply raw panels or completely fabricated joiner systems configured to your specific needs.

Core materials:

- aluminum honeycomb
- stainless steel honeycomb
- Nomex
- rock wool
- fire retardant foams
- Marinite

Surface materials:

- aluminum (smooth or Rigidized® Metals deep-textured)
- stainless steel (smooth or Rigidized® Metals deep-textured)
- Fiberglass-Reinforced Plastic (FRP)
- Arvinyl Decorative Vinyl Laminates
- Arborite® Metal Core High-Pressure Laminates (HPL)





# even more selection

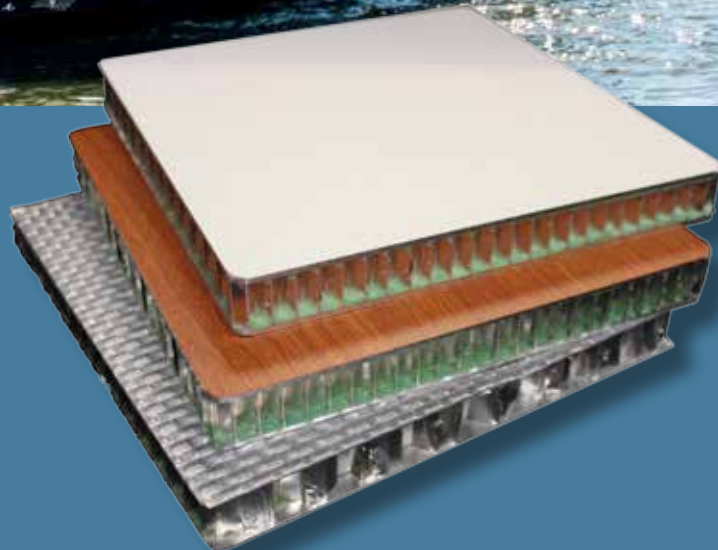
decorative



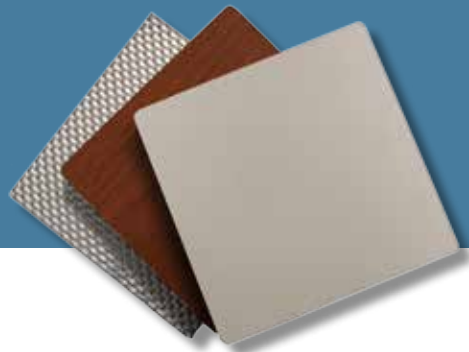
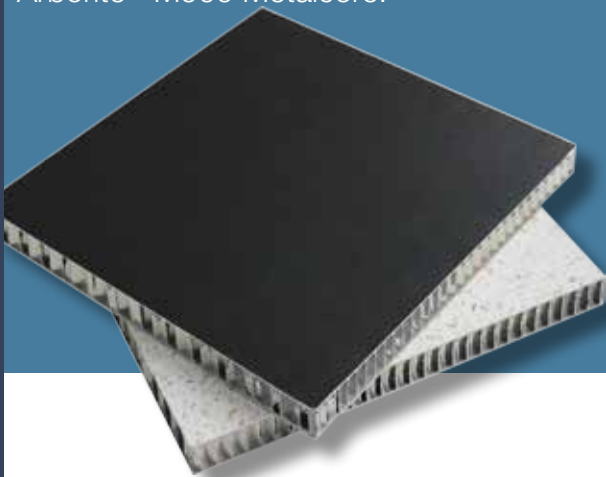
## Decorative & Ceiling Panels

Rigidized® Metals stainless or decorative IMO-Certified aluminum panels are available in 1/4" and 3/8" thicknesses for lightweight ceiling applications.

In addition to the family of Rigidized® Metals textures, decorative panels meet IMO Certification when using Arvynl USCG-approved vinyl skins or Arborite® M900 Metalcore.



Rigidized® Metals' decorative panels were the choice for interior wall panels on the New York City Ferries by Hornblower.



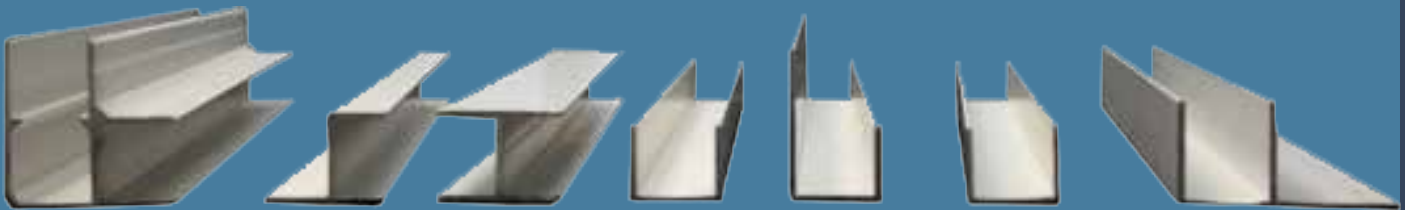
decorative

# support from all angles

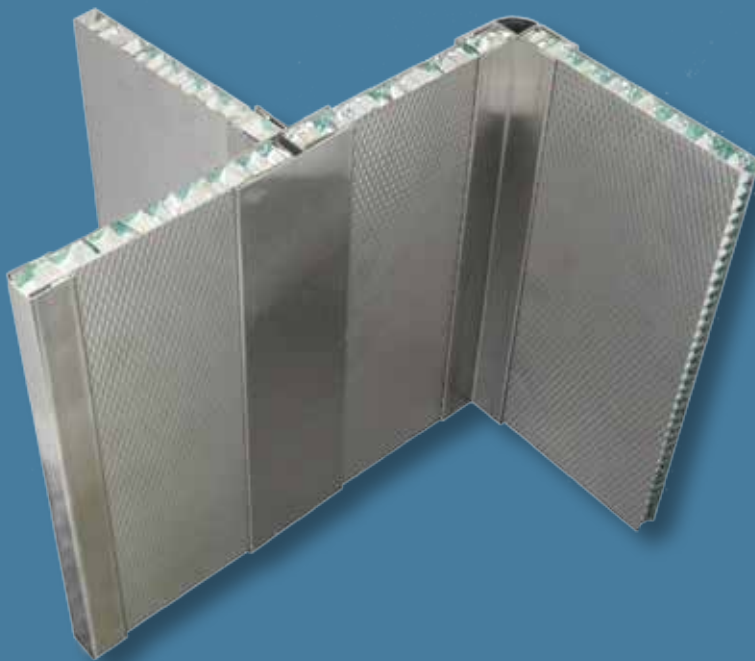
## Panel Joiners

Aluminum joiner extrusions in alloy 6063T5 Satin Anodized finish are available as part of the Rigidized® Metals marine panel system. Select from:

- U-Channels and end caps
- H, T, F, h and other shapes
- Corner profiles
- Similar items are available for 1/4", 1/2", 5/8" and 3/4" panel systems
- Lengths available for most items: 4', 8', 12', 16', and up to 24' long



When working with stainless steel panels, our fabrication department will make formed joiners to match custom panel thickness, length, finish and pattern.



Options include:

- Corner
- End Cap
- Joiner
- Joiner with End Cap (Tee)
- Lengths upon application

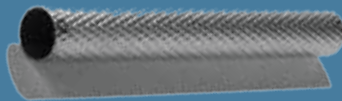
# lean, clean, and durable

deep textured components



Rigidized® Metals' stainless steel tread plate patterns are ideal for engine rooms, panels, and on decking and steps. Stainless steel is easy to clean and maintain, and slip resistant, making the area safer, overall.

Additionally, the deep texturing process at Rigidized® Metals Corporation creates a hollow-back tread plate, resulting in a product that is 16%-18% lighter than conventional flat-back tread plate. A clean tread plate requires less preparation for finishing and can help achieve a better, longer lasting finish, keeping the components in sustainable service longer. The weight reduction means you start with less material resources, and in transportation applications, this weight reduction saves energy in everyday use.



Rigidized® Metals' textured Rigi-Grip® tubing, using our Trim-Tex materials, can be used for railings, grab bars, transportation holds and ADA-compliant gripping rails. The texture in the material allows for better grip-ability, limiting and preventing accidental injury.



Rigidized® Metals provides wall cladding and paneling for commercial dining areas in deep textured stainless steel, brass and copper. Our products can also be used on bar tops and fronts, sound absorbing acoustical paneling and serving stations.

Rigidized® Metals' materials, used in dining applications, offer heat resistant, hygienic, anti-bacterial and durable surfaces that can withstand abuse and high traffic and require minimal maintenance.

commercial dining



# meets functionality

## Furniture

Rigidized® Metals' textured metals protect high-traffic surfaces from abuse and hide scratches on furniture and counters. Decorative surfaces can be applied to lightweight honey-comb panels to add color and style. Tables, bunk beds or desks may be supplied as full panels or cut to designer shapes.

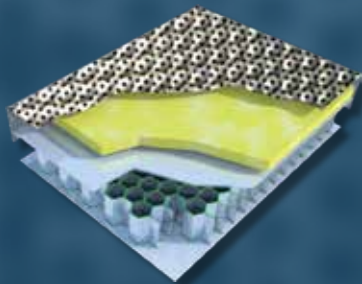


bulkheads & furniture

## Marine Acoustics

Acoustical panels are made up of a honey-comb IMO certified panel construction as a base to the acoustic insulation and deep textured perforated stainless steel as a cover.

Rigidized® Metals has tested patterns 6WL® and 1RL on perforated stainless steel with both 1/2" and 1" deep acoustic insulation. We can offer both sheet goods for customer fabrication or assist in creating custom products to customer specifications.



Frequency (Hz)	Absorption Coefficient, $\alpha$ (A/m <sup>2</sup> )			
	Pattern 6WL® 1/2" Acoustical Mat	Pattern 1RL Perforated 1/2" Acoustical Mat	Pattern 6WL® 1" Acoustical Mat	Pattern 1RL Perforated 1" Acoustical Mat
100	0.12	-0.04	-0.10	-0.05
125	0.06	0.04	0.09	0.08
160	0.09	0.04	0.15	0.13
200	0.09	0.08	0.17	0.21
250	0.14	0.13	0.22	0.27
315	0.20	0.20	0.42	0.46
400	0.27	0.28	0.55	0.61
500	0.38	0.40	0.73	0.76
630	0.48	0.46	0.79	0.83
800	0.59	0.58	0.86	0.92
1000	0.68	0.69	0.94	0.98
1250	0.73	0.77	0.98	1.02
1600	0.80	0.83	1.02	1.07
2000	0.86	0.89	1.01	1.07
2500	0.88	0.88	1.01	1.06
3150	0.89	0.89	1.00	1.03
4000	0.90	0.88	0.95	1.02
5000	0.86	0.85	0.89	0.96
<b>SAA</b>	<b>0.51</b>	<b>0.52</b>	<b>0.73</b>	<b>0.77</b>
<b>NRC</b>	<b>0.50</b>	<b>0.55</b>	<b>0.75</b>	<b>0.75</b>

acoustics



# Rigidized® Metals' Custom Panels

- Certified or Commercial
- Plain or Textured
- Aluminum or Stainless Steel
- Decorative APL or Vinyl Laminates

<b>Anodized Ceiling Panel</b>	<ul style="list-style-type: none"> <li>• Light weight aluminum-faced honeycomb sandwich panel</li> <li>• Face and back are anodized aluminum sheet</li> <li>• Aluminum honeycomb core</li> </ul>
<b>Aluminum Bulkhead Panel</b>	<ul style="list-style-type: none"> <li>• Light weight aluminum-faced honeycomb sandwich panel</li> <li>• Face and back are chem-treated aluminum sheet</li> </ul>
<b>Textured Aluminum Bulkhead Panel</b>	<ul style="list-style-type: none"> <li>• Light weight aluminum-faced honeycomb sandwich panel</li> <li>• Face and back are chem-treated, mill finish aluminum sheet</li> <li>• One or both sides of the panel has a Rigidized® Metals' textured pattern</li> </ul>
<b>Stainless Steel Bulkhead Panel</b>	<ul style="list-style-type: none"> <li>• Light weight sandwich panel with stainless steel face</li> <li>• Choice of stainless steel or chem-treated, mill finish aluminum backer</li> <li>• Choice of stainless alloy (304, 316 or other) and finish (2B, #4 or other)</li> </ul>
<b>Textured Stainless Steel Bulkhead Panel</b>	<ul style="list-style-type: none"> <li>• Light weight sandwich panel with stainless steel face</li> <li>• Choice of stainless steel or chem-treated mill finish aluminum backer</li> <li>• Choice of stainless alloy (304, 316 or other) and finish (2B, #4 or other)</li> <li>• One or both sides of the panel has a Rigidized® Metals' textured pattern</li> </ul>
<b>Stainless Steel Sanitary Partition Panel</b>	<ul style="list-style-type: none"> <li>• Light weight sandwich panel with stainless steel face</li> <li>• Choice of stainless alloy (304, 316 or other) and finish (#4, or other, such as Sandtex® or Linen BA)</li> <li>• Sanitary partitions are suitable for water closets, urinal screens and showers</li> </ul>
<b>Textured Stainless Steel Sanitary Partition Panel</b>	<ul style="list-style-type: none"> <li>• Light weight sandwich panel with stainless steel face</li> <li>• Choice of stainless alloy (304, 316 or other) and finish (#4, or other, such as Sandtex® or Linen BA)</li> <li>• Sanitary partitions are suitable for water closets, urinal screens and showers</li> <li>• One or both sides of the panel has a Rigidized® Metals' textured pattern</li> </ul>
<b>Metal Core or Arvynyl Bulkhead Panel</b>	<ul style="list-style-type: none"> <li>• Light weight honeycomb sandwich panel with an Aluminum Melamine Wilsonart Series 900 "Metal Core" surface, or an Arvynyl USCG approved vinyl laminate on one or both sides of the panel.</li> <li>• For applications requiring a finished laminate look on aluminum-skin panels</li> </ul>

\*\*\* Specifying Rigidized® Metals' Textured Patterns in IMO C-Class panels offers designers and builders:

- Increased surface protection from graffiti, scuffs, dents and scratching in high-traffic areas
- Controlled glare with increased light diffusion and optical flatness
- Reduced weight from downgauging and panel skin thickness while maintaining rigidity
- Twenty patterns to promote architectural flair along with fit and function for living quarters, galley and interior design