

**decoustics**

# Madero

Natural Wood Finishes



## A collection of impressive natural wood veneered acoustical finishes.

It is possible to specify natural wood veneered panels with exceptional acoustical performance. Ideal for both wall and ceiling applications, Madero finishes maximize the warmth and rich figure of natural wood veneers, while achieving superb acoustical control. The Madero line is available in a wide variety of natural wood veneers or custom paint colors. Custom veneer layups and toning can be specified.

### Quadrillo<sup>®</sup>

Quadrillo is the premium finish in the Madero collection.

### Solo-M

The linear look of Solo fabricated to standard or custom ceiling modules.

### Solo<sup>®</sup>

Solo is a grooved plank finish cut to fit on site.

## Customized Applications

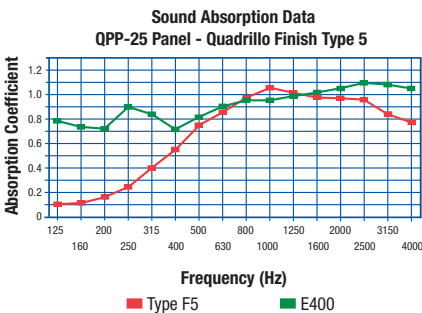
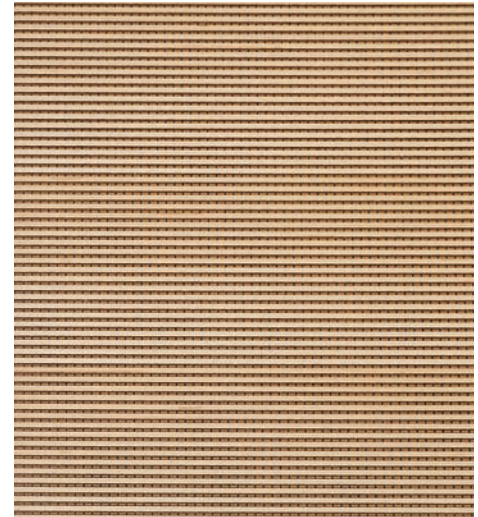
A selection of custom applications epitomizing Madero products warmth and endless versatility.

# Quadrillo



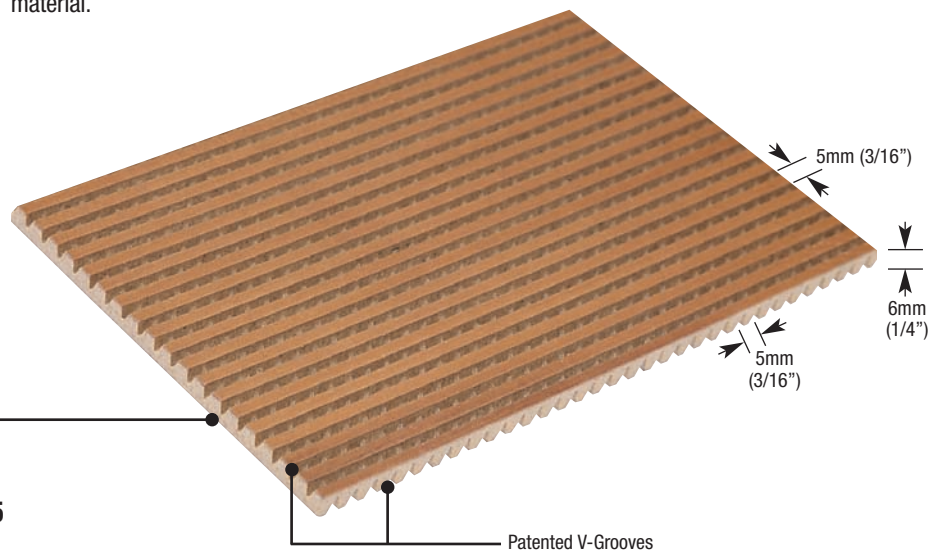
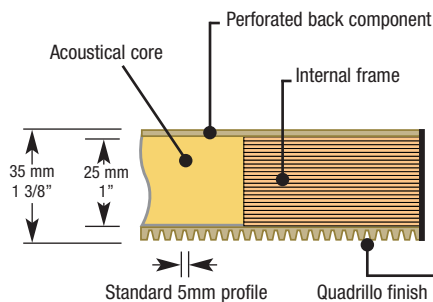
Pear veneer, book matched, center balanced.

Quadrillo is a natural wood veneer finish. Acoustical absorption is achieved through the use of Decoustics' unique patented perforation technology in combination with a high performance acoustical core. The product is ideal for both wall and ceiling applications.



Although the percentage of open area of Quadrillo is only approximately 4%, the patented V-grooves create a four sided "funnel" effect that allows sound to arrive at a variety of angles thereby focusing the transfer of energy over a broader surface area of absorption material.

When observing from a normal viewing distance, the lineation or grooves essentially disappear rendering Quadrillo to appear as normal millwork.

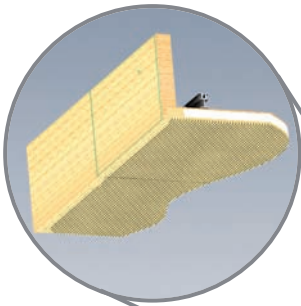


## QPP-25 Panel - Quadrillo finish type 5

Quadrillo® U.S. Patent No. 5,024,290

# Madero

The natural qualities of wood greatly enhance this boardroom however its use has traditionally been limited because of its poor sound absorption properties. Quadrillo is available prefinished in clear lacquer or factory painted. Decoustics can provide custom lacquer toning, tinting and sheen to match other wood finishes. Quadrillo finished panels are frequently used in conjunction with millwork veneered panels, and in such cases it is highly recommended that a single finishing source be used to match toning and sheen. In these instances, Decoustics can provide unfinished panels.



Integrated finishes with custom Designed Returns complete this boardroom ceiling design.

# Quadrillo



Quadrillo finished panels in five separate sections installed between pilasters on side walls.

Quadrillo is available up to 1240 mm x 3050 mm (4' x 10'), however one should consider the potential problems associated with large units. Wood products have significant movement when subjected to climatic changes which can easily be overcome by using smaller panels. We typically recommend manageable sizes up to 20 square feet per panel. Quadrillo veneer lay up is produced as slip matched, quarter cut, as a standard. Other veneer cuts and lay up options are available. The minimum radius of an outside curve is 800 mm (approx. 32") to the face of the part. Quadrillo is available prefinished and unfinished. The color which is perceived is the total effect when viewed from a distance. It is important that the samples be approved based on the finished product and not just a sample of veneer only. Held close in hand, the variation could be quite evident but viewed at a moderate distance, the color will appear as one.



Quadrillo panels were specified for this medical facility auditorium. The concave absorptive and convex reflective panels give an exceptional acoustical performance while keeping the beauty and sophistication of natural veneered wood.

# Madero



Create your own custom patterns by specifying profile spacings. Solid portions must be multiples of 5mm. Consult the factory for assistance.



# Quadrillo Profiles

The grooving can be stopped to create an integral border of any width, or you can specify a traditional frame.



# Madero

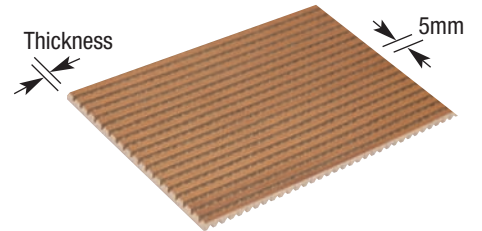


Quadrillo panels. Sequenced cherry, quarter cut and slip matched.



## Quality Standards & Specifications

Quadrillo finish is made of high-density fibreboard (HDF) which is 30% denser than standard fiberboard and much more durable. The high-density fibers are more crisp in machining and not susceptible to felting or fluffing in the grooves.



Quadrillo is finished using a two-step lacquer process that involves a “fill” first coat which is sanded and then top coated. The sheen value is high, consistently at a 30, and can be customized to any level. The lacquer and toning are brought into the grooves so the surface color is the same as the substrate.

## Specifications - Walls

When Quadrillo panels are located in conjunction with millwork and non acoustic panels, it is highly recommended that it be specified in the millwork section-Division 6. This will enable better design and installation control where veneer sourcing and finishing can be better coordinated.

## Specifications - Ceilings

When Quadrillo panels are used for a ceiling application it is recommended to be specified in the specialty acoustics ceiling-Division 9. This will allow an experienced ceiling contractor to install Decoustics wood ceilings direct to substrate or with one of many different Decoustics engineered systems.



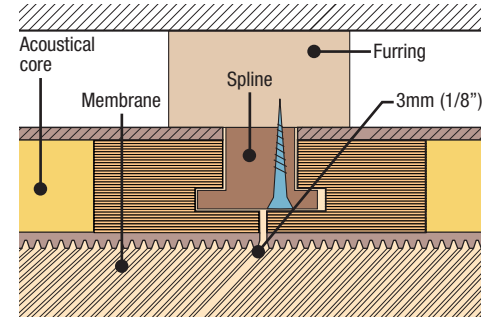
# Quadrillo



Maple veneer, plain sliced, slip matched. Clear lacquer finish.

When used as a monolithic panel system, kerfed edges with splines are used to level the face. The reveal between panels is 3 mm (1/8") which simulates the "V" groove cut on 5 mm centres.

## Mounting Detail Example



## Climate Conditions

Quadrillo panels must be stored, installed and maintained only in a stable ambient environment (humidity min. 35% - max. 55%, temperature not to exceed 27°C / 80°F).

Quadrillo panels must be allowed to acclimatize on site for 72 hours prior to installation.

## Fire Classifications:

Quadrillo does not carry a "Class A" (ASTM-E84) composite designation. Few interior architectural wood products do. Quadrillo finish, acoustical core, and framing are Class A components. The veneer thickness is less than 1/28". The Quadrillo assembly is currently "Class C".

Refer to AWI handbook for more detailed data.

*Note:* Local codes fluctuate widely; check with authorities prior to use.

## Weights:

**QPP-19:** 3.0 lbs./ft<sup>2</sup> – 14.75 kg/m<sup>2</sup>

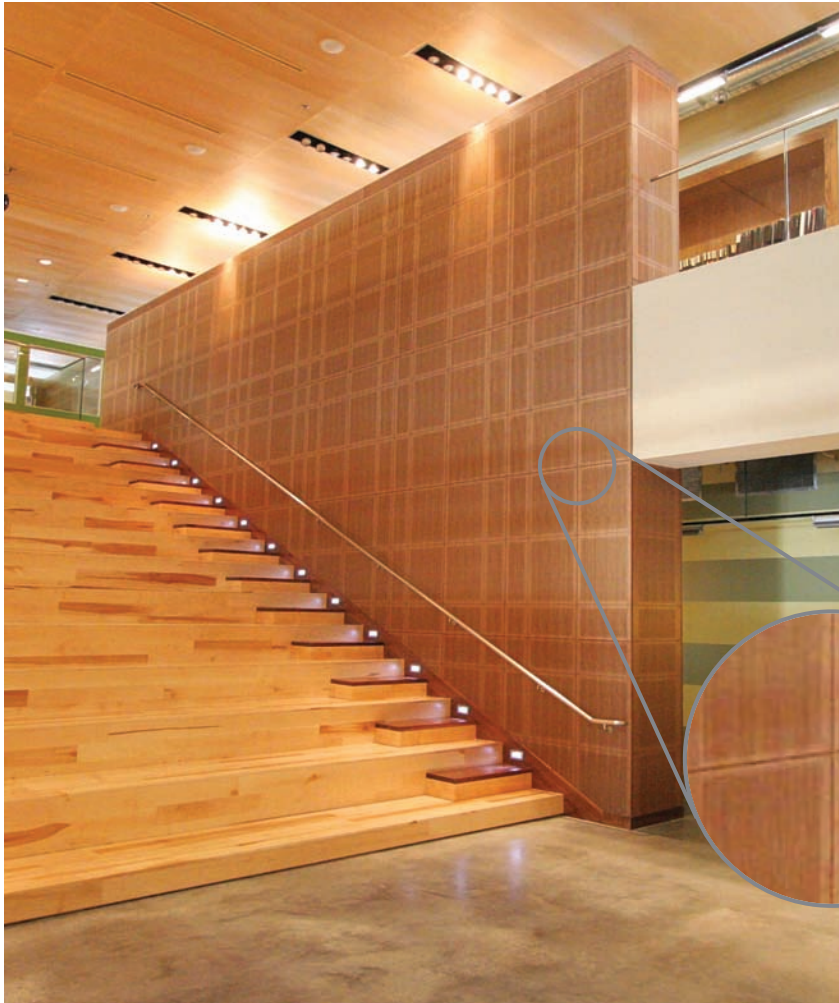
**QPP-25:** 3.5 lbs./ft<sup>2</sup> – 17.1 kg/m<sup>2</sup>

**QPP-50:** 5.5 lbs./ft<sup>2</sup> – 26.85 kg/m<sup>2</sup>

FINISH TYPE 5	PANEL THICKNESS	FREQUENCY (Hz)						NRC	SAA
		125	250	500	1000	2000	4000		
Panel	Type F5 Mounting								
QPP-19	Panel 1-1/8" (28 mm) Core 3/4" (19 mm)	0.04	0.23	0.52	0.90	0.94	0.66	0.65	0.64
QPP-25	Panel 1-3/8" (35 mm) Core 1" (25 mm)	0.09	0.25	0.75	1.05	0.99	0.77	0.75	0.75
QPP-50	Panel 2-3/8" (60 mm) Core 2" (50 mm)	0.28	0.67	1.13	1.03	1.01	0.94	0.95	0.96
Panel	Type E400 Mounting								
QPP-19	Panel 1-1/8" (28 mm) Core 3/4" (19 mm)	0.78	0.77	0.61	0.86	1.04	0.70	0.80	0.82
QPP-25	Panel 1-3/8" (35 mm) Core 1" (25 mm)	0.79	0.90	0.81	0.95	1.05	1.05	0.90	0.91
QPP-50	Panel 2-3/8" (60 mm) Core 2" (50 mm)	0.80	0.87	1.00	1.07	1.06	1.00	1.00	0.98

Additional test results available.

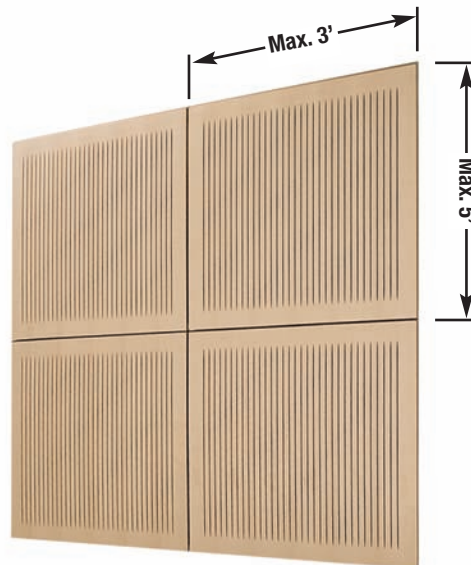
# Madero



Solo-M panels are a modified version of the standard Solo product and an economic consideration in lieu of Quadrillo finished panels which offers large panels, design versatility and full customization. Solo-M is produced as a panel rather than planks and has the same quality standards, acoustic performance and fire rating as Solo.

Solo-M is available prefinished in clear lacquer or unfinished for post application by others. Decoustics can provide custom lacquer toning, and sheen to match other wood finishes. Custom paint finishes are available. Veneer lay up is produced as slip matched, quarter cut as a standard. Other veneer cuts and lay up options are available.

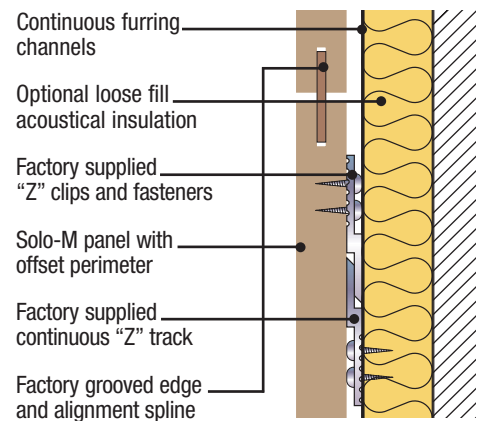
Integral border Solo-M wall panels designed with a custom grooved layout and simulated panel joints creating a unique visual appearance.



## Sizes

Panels are available up to a maximum of 3 feet in width and 5 feet in length. Please consult your rep or the factory for specific limitations.

## Direct Mount - Wall



# Solo-M

## Custom suspensions for Solo-M and Quadrillo panels

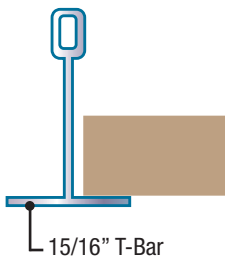
Ceilencio custom ceiling suspensions.



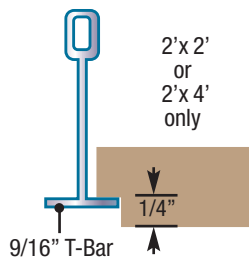
Ceilencio's easy downward access is demonstrated using Solo-M panels.

## Conventional suspensions for Solo-M panels

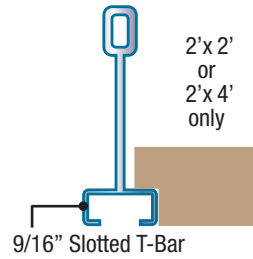
### Standard Lay-In



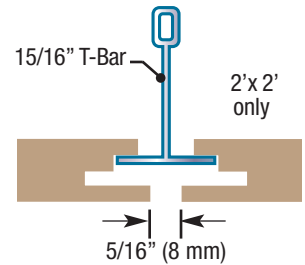
### Tegular Edge Lay-In



### Screwslot Grid



### Concealed Lay-In



For all lay-in applications, a locking safety tether strap will be provided to secure panel to grid.

## Direct Mount - Ceiling

