

Advisory Bulletin



BUILDING VALUE SINCE 1906

TB-37 Core Material Used in Bobrick Toilet Partitions

1040/1550/1540 Series

Particle-board is the substrate for most laminated plastic toilet partitions. It is fabricated of wood chips and flakes embedded in resins. The wood most commonly used in commercial particle-board is pine, a soft wood. Bobrick utilizes only hem/fir particle-board, engineered with fir, a favorite material for building construction, and hemlock, a hard wood.

Bobrick core stock is manufactured in a 3-ply configuration, with finely ground wood in dense resin on outer surfaces and coarser chips in the center. Comparing the strength of conventional and hem/fir particle-boards, both in nominal 45-pound density, provides the following results:

Property	Type of Particle-Board		
	Bobrick Hem/Fir	Standard Pine	
Modulus of Elasticity	400,000 PSI	325,000 PSI	
Modulus of Resistance	2,400 PSI	2,100 PSI	
Internal Bond	100 PSI	60 PSI	
Screw Holding:	Face	250 LB	225 LB
	Edge	225 LB	200 LB

1080 Series

Core is an inexact term when discussing compact grade laminate, since this material is fused into a homogeneous unit with its face sheets; there is no glue line, which is vulnerable to water penetration and delamination, between the core and the face material.

A clear, tough melamine sheet is the outermost layer, followed by a colored or patterned face sheet, then multiple layers of specially fabricated kraft paper. All of these sheets are impregnated with resins and thermally fused, utilizing heat of 284° to 302° (140° to 150°C) and pressure of 1,000 psi.