

THE THOMPSON & LICHTNER COMPANY, INC.

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U.S ARCHITECTURAL PRODUCTS, INC.

LINCOLN, RHODE ISLAND

PULL-OUT TESTS OF SELF DRILLING SCREWS ON VERSAROC PANELS

Test Number -- EE 555
Date Received -- 5-26-05 Date Tested - 6-9-05
Source -- Submitted by your Mr. Michael J. Kavanagh
Specimens -- -Versaroc 12mm panels, Unsealed
-Versaroc 16mm panels, Sealed
-Versaroc 19mm panels, Sealed
- Several of each size metal fasteners identified as follows:
#8 x 1-1/2" self drilling screws
#10 x 1-1/2" self drilling screws
#12 x 1-1/2" self drilling screws
Test Procedure -- Three screws of each size were drilled into each size VERSAROC panel using an electric drill. The screws were drilled allowing the head of the screw to remain approximately 3/16" above the panel to permit gripping of the screw for the pull-out test conducted using our calibrated testing machine.
Results -- The following data have been obtained:

PULL-OUT VALUES, LBF

Screw Size	<u>VERSAROC 12mm</u>		
	<u>#8 x 1-1/2"</u>	<u>#10 x 1-1/2"</u>	<u>#12 x 1-1/2"</u>
	256	256	260
	228	262	263
	<u>238</u>	<u>260</u>	<u>265</u>
Average	241	259	263

Screw Size	<u>VERSAROC 16mm</u>		
	<u>#8 x 1-1/2"</u>	<u>#10 x 1-1/2"</u>	<u>#12 x 1-1/2"</u>
	279	310	296
	283	305	335
	<u>305</u>	<u>319</u>	<u>339</u>
Average	289	311	323

Screw Size	<u>VERSAROC 19mm</u>		
	<u>#8 x 1-1/2"</u>	<u>#10 x 1-1/2"</u>	<u>#12 x 1-1/2"</u>
	305	395	419
	338	382	379
	<u>355</u>	<u>365</u>	<u>399</u>
Average	333	381	399

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Evan Karalolos
Laboratory Director