TECH BULLETIN



Subject: Diaphragms

Date: November 2007

R-Control SIPs have been evaluated for use as diaphragms in structures. Diaphragm applications include both wall and roof assemblies that are subjected to seismic or wind loads.

Through large and small scale testing conducted at the APA laboratories using an independent structural consultant, it was determined that R-Control SIPs can develop design diaphragm capacities of up to 850 lbs/ft. Please refer to Load Design Chart #7 for R-Control Wood Screw and nail spacing required to obtain this capacity.

These tests have allowed for the determination of design capacities for R-Control Wood Screws and nails when used in diaphragms. The following lateral load capacities are recommended:

R-Control Wood Screws 250 lbs. 8d nails @ surface splines 62.5 lbs.

These design values include a factor of safety of three on the ultimate load.

In all diaphragm applications the design of the lateral load resisting system must be engineered to provide a load path for the forces that the structure will develop. This is provided by the engineer of record on the specific project.







R-Control SIPs are made exclusively with Foam-Control EPS. R-Control SIPs and Foam-Control EPS are manufactured by AFM Corporation licensees.

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