A series of tests was conducted in accordance with ASTM E 72 to determine the shear resistance of gypsum board applied to one side of wood stud partitions 16" o.c. using Type S or W screws at different spacings. Parallel and perpendicular applications, with horizontal joint unblocked, were evaluated. The results are summarized below. These values represent average ultimate shear. Appropriate safety factors should be considered for design use.

The following conclusions can be drawn from these tests:

All other conditions being equal,

1. Shear values are comparable for both Type S and W screws,
2. Shear values for parallel application exceed those for perpendicular application,
3. Shear values for 5/8" gypsum board exceed those for ½" gypsum board,
4. Shear values increase with closer spacing of perimeter fasteners, and
5. When compared to other shear test results, shear values for screws are higher than for nails.
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