

## Test: Strength of Shelf Anchoring System

### Purpose:

To compare the strength of anchoring systems for SCHULTE, Lee/Rowan, and Closet Maid.

### Method:

SCHULTE, Lee/Rowan and Closet Maid comparable anchors were installed into a wall consisting of 1/2" piece of drywall attached to 2" x 4" studs 16" on center. Holes for anchors were drilled in between the two studs. Anchors were installed per manufacturer's instructions. Each manufacturer's shelf was installed with their shelving anchors and pulled by a fixture connected to a force gauge. Multiple anchors from each manufacturers were tested for accuracy

### Results:

Closet Maid Anchor: pulled out of drywall at 71 lbs. of force. Anchor wings were collapsed on anchor allowing it to pull through original hole with only slight enlarging. 1/4" x 1/2" elongated hole was left with slight fracture at top and bottom of hole.

Lee/Rowan Anchor: pulled out of drywall at 66 lbs. of force. Anchor wings were collapsed on anchor allowing it to pull through original hole with only slight enlarging. 1/4" x 1/2" elongated hole was left in drywall.

SCHULTE Tri-Loc® Anchor: drywall fractured at 100 lbs. Hole roughly 1-1/2" in diameter. Anchor did not fail and remained in triangular locked position.

### Observations/Comments:

Closet Maid and Lee/Rowan anchors of similar design failed at similar loads. Both anchors seemed to fold back to the pre-expanded position and pull back out of the hole.

The SCHULTE Tri-Loc® anchoring system did not fail. The drywall was the actual mode of failure.

When observing the anchors pulling out, Closet Maid's and Lee/Rowan's began to loosen from back wall at less than 40 lbs. of pressure. SCHULTE's Tri-Loc® anchor did not loosen, but held tight until the drywall failed.

