

Attention: General Distribution

Date: July 5, 2018

Reference: Final Intertek report on screw spinout testing (H150.01-115-17-R1)

**Disclaimer:** These standards and practices are for educational purposes only and are not a mandate. These standards and practices may vary depending on geographic region, type of work and member preference.

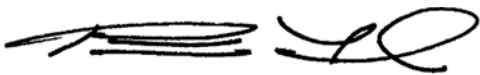
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The final report by Intertek on field trials to determine the occurrence of screw spinout on assemblies constructed of impact resistant gypsum panels on light gage steel studs was issued 6/4/2018. The report was done under contract with the Gypsum Association, and the field trials were witnessed by representatives of the AISI and AWCI, as well as the SFIA.

The tests or field trials concentrated on gypsum panel products with a hard body impact resistance level 3 installed on 20 gage “EQ” (19 to 23 mil) as well as NS 20 gage (30 mil) steel drywall studs. Tests were run in three locations at separate times – San Antonio TX, Carnegie, PA, and Columbus, OH. Several different board and stud manufacturers’ products (each of similar type), and several manufacturers’ screws (all of essentially two types – sharp point or drill point) were used – and varying gun speeds were used (2500 to 5300 rpm). It should be noted that the use of drill point screws is for steel studs of 33 mil and thicker per ASTM standards and elsewhere.

*in 478 tests of 30 mil studs using self-piercing #6 screws as is appropriate per the correct standards, there were only 4 spinouts. Likewise, in 1065 tests of the thinner “EQ” studs, there were only 2 spinouts*

The results indicate that in 478 tests of 30 mil studs using self-piercing #6 screws as is appropriate per the correct standards, there were only 4 spinouts. Likewise, in 1065 tests of the thinner “EQ” studs, there were only 2 spinouts. This shows that with the proper type of fastener, regardless of make, a wide range of gun speeds, a variety of impact resistant board, and multiple stud manufacturers, the “EQ” studs performed as well or better than standard 30 mil drywall studs in the same application for screw spinout rates. One caution would be that, in keeping with the appropriate standards, drill point screws should be avoided in these lighter gage materials.



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