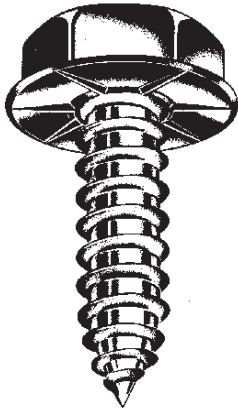


HURRICANE™ SCREW

TAPPING SCREWS FOR THIN GAGE METAL



ITW Shakeproof's Hurricane anti-strip screw is considered the optimum performer in thin sheet - even .025" or thinner! The screw creates a positive torque brake in thin sheet metal, aluminum or plastic. It assures maximum installation efficiency while eliminating the rework associated with stripped screws.

Benefits

- Thinner, lighter weight materials can be specified because Hurricane screws eliminate stripping problems in materials as thin as .025" - sometimes even thinner!
- Costs can be reduced because smaller screws out-perform the larger screws currently being used in thin sheet applications.
- Large, predictable operating window greatly reduces potential strip-outs and the need for operator sensitivity. This means greater efficiencies, no stripping-related rework or scrap!
- Higher back off torques assure a tight, secure assembly.
- There is minimal damage to bearing surface; burrs, no silvers.
- Hurricane screws work in existing holes. Interchangeable with existing designs.

How it works

- Underside of head is slightly dished.
- Specially tapered ribs on underside of head cold form ridges on bearing surface as screw is turned down, creating a positive torque brake.

Predictable Safe Operating Range

The difference between the maximum drive torque required to set a screw and the minimum torque at which that screw may strip out is the safe operating range. The bigger the range the easier it is to safely drive the screw. Less time is needed for "fine tuning" drive torques. Operators do not have to be tentative about installation. Efficiency is maximized. Stripping is minimized.

Laboratory tests conducted by ITW Shakeproof showed that the competitive undercut, saw-tooth strip resistant screw consistently showed wide variations in strip torque, averaging as much as a 31.4 lb./in. range between minimum and maximum strip torque in an 8-18 screw into .025" thick steel.

This makes it extremely difficult to predict at what point stripping will occur. To avoid rework and scrap, driver torques must be set to accommodate minimum stripping values.

Stripping torques for the 8-18 Hurricane screw showed a variation of just 12.9 lb./in. between minimum and maximum strip torques in the same material.

Test results clearly show the superiority of the Hurricane anti-strip screw:

In .025" Thick Steel Sheet

	Max. Drive Torque-lb./in.	Min. Strip Torque-lb./in.	Safe Operating Range
8-18 Undercut Saw-Tooth Tapping Screw	4.93	20.8	17.87
8-18 Hurricane Tapping Screw	5.11	36.2	31.09

These test results show that in .030" thick steel sheet the #8 Hurricane screw actually works far better than the #10 undercut saw-tooth strip resistant screw.

In .030" Thick Steel Sheet

	Max. Drive Torque-lb./in.	Min. Strip Torque-lb./in.	Safe Operating Range
8-18 Undercut Saw-Tooth Tapping Screw	6.58	22.7	16.02
8-18 Hurricane Tapping Screw	6.50	42.1	33.6
10-16 Undercut Saw-Tooth Tapping Screw	6.07	29.8	23.73
10-16 Hurricane Tapping Screw	9.34	41.0	31.66

Note: Hurricane is a registered trademark of Illinois Tool Works Incorporated