

Installation and Assembly Guidelines

The information below is provided from independent tests conducted by
Swansea Institute of Higher Education, (www.sihe.ac.uk).

Copies of the independent test reports are available on request for a variety of sizes.

Note. Pre-coated material thickness includes coating and material substrate.

Tightening torque values indicated below, are guidelines when used in automated assembly systems.
Non automated assembly methods (hand held drivers) can also be used to achieve system lockdown.

Material Thickness			Screw Diameter	Recommended Tightening Torque			
Imperial	UK Wire	Metric		Minimum		Maximum	
				Nm	Lbs. Inch	Nm	Lbs. Inch
0.020/0.024	25	0.5/0.6	Ø3	0.6	5.3	0.8	7.1
			Ø3.5	0.8	7.1	1.0	8.8
			Ø4	0.8	7.1	1.0	8.8
0.028/0.032	22/21	0.7/0.8	Ø3	0.8	7.1	1.0	8.8
			Ø3.5	1.0	8.8	1.2	10.6
			Ø4	1.2	10.6	1.4	12.4
			Ø5	1.4	12.4	1.6	14.1
			Ø6	2.0	17.7	2.4	21.2
0.036/0.040	20/19	0.9/1.0	Ø4	2.0	17.7	2.4	21.2
			Ø5	2.4	21.2	2.8	24.8
			Ø6	2.8	24.8	3.5	31.0
			Ø8	3.5	31.0	5.0	44.2
0.043/0.047	18	1.1/1.2	Ø5	2.2	19.4	3.0	26.5
			Ø6	2.6	23.0	3.4	30.0
			Ø8	3.0	26.5	4.0	35.4
0.051/0.055	17	1.3/1.4	Ø6	3.2	28.3	5.0	44.2
0.059/0.063	16	1.5/1.6	Ø6	4.0	35.4	8.0	70.8
			Ø8	8.0	70.8	14.0	123.9
			Ø10	10.0	88.5	16.0	141.6
0.067/0.071	15	1.7/1.8	Ø8	12.0	106.2	18.0	159.3
0.074/0.078	14	1.9/2.0	Ø8	16.0	141.6	22.0	194.7
			Ø10	20.0	177.0	28.0	247.8
0.093/0.099	13	2.4/2.5	Ø10	40.0	354.0	55.0	486.0

Material used during the testing process (CS1 - Mild Steel), High Torque Fastener Systems, recommends that due to variations in material specification, and in concert with the application design the above values may vary and should be confirmed with the specific grade of material being used.

