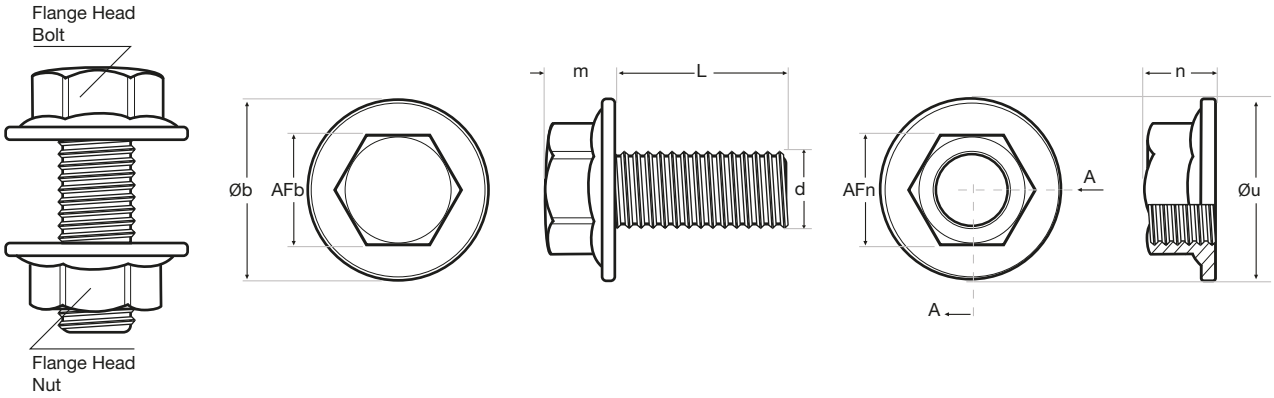
Purlin Bolts and Nuts Installation Guide

Milsons Purlin Bolts comprise of a property 8.8 flange bolt and a class 8 flange nut, and are available in either a zinc plated or hot dip galvanised finish. Refer to the table below for indicative tightening torque.

Part No.	Finish	Thread Size (D)	Bolt, mm				Nut, mm			Indicative Tightening Torque (N-m) (T)	Resulting Bolt Tension (P)
			Across Flats (AFb)	Head Height (m)	Flange Diameter (øB)	Bolt Length (L)	Across Flats on Nut(AFn)	Nut Flange Diameter (øu)	Nut Height (n)		
PBN8812X30G	Galv	M12	18	10.5	27.5	30	18	28	12.5	73.35	24,450
PBN8812X30Z	Zinc	M12	18	9	27.5	30	18	28	12.5	64.55	24,450
PBN8816X35G	Galv	M16	24	13.5	32	35	24	32	17.5	182.0	45,500



Indicative tightening torque (T) is calculated using the basic formula

$$T = P \times k \times D$$

Where:

P: Intended Bolt tension (Assumed to be 50% of the bolt's proof load)

k: Is the torque-friction factor (Zinc plated assemblies: 0.22, Galvanised assemblies: 0.25)

D: Is the thread diameter

*Note that the **k** value can vary depending on thread conditions, thread/bearing lubrication, and site conditions. All bearing surfaces are assumed to be in full contact as shown in fig 1.*

Installation Instructions

As shown in figure 1. The base of the head as well as the base of the nut should be in full contact with the fastened component(s).

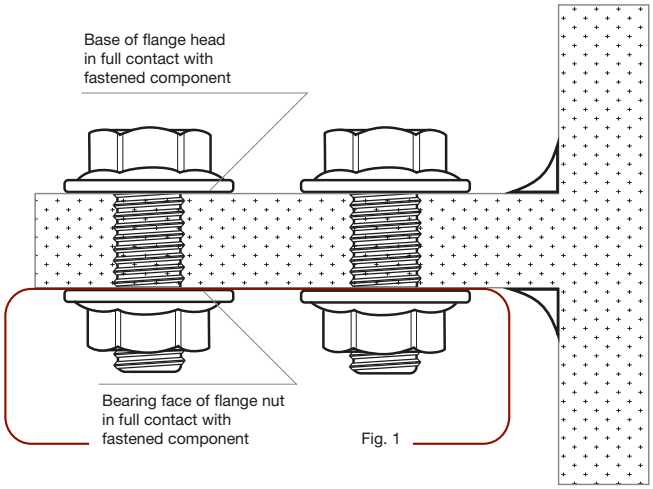


Fig. 1