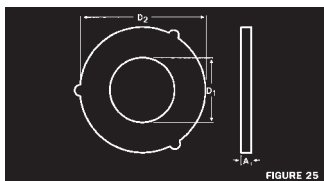


Blacks High Strength Structural Bolts (Flat Round Washers)



Standard Thread Length for Bolts

Nominal Length of Bolt l	Nominal Length of Thread b
Up to and including 125mm	$2D + 6\text{mm}$
Over 125 up to and including 200mm	$2D + 12\text{mm}$
Over 200mm	$2D + 25\text{mm}$

Table 35 Dimensions of Flat Round Structural Washers

Nominal Diameter of Bolt	Inside Diameter D1		Outside Diameter D2		Thickness A	
	Max.	Min.	Max.	Min.	Max.	Min.
M16	18.43	18.0	34.0	32.4	4.60	3.1
M20	22.52	22.0	39.0	37.4	4.60	3.1
M24	26.52	26.0	50.0	48.4	4.60	3.4
M30	33.62	33.0	60.0	58.1	4.60	3.4
M36	39.62	39.0	72.0	70.1	4.60	3.4

All dimensions in millimetres.

Blacks High Strength Structural Bolts (Square Taper Washers)

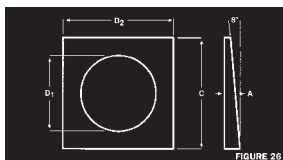


Table 36 Dimensions of Square Taper Washers

Nominal Diameter of Bolt	Inside Diameter D1		Width Across Flats D2 Nominal	Mean Thickness A	
	Max.	Min.		5° Taper	8° Taper
M16	18.43	18.0	31.75	4.76	6.35
M20	22.52	22.0	38.10	4.76	6.35
M24	26.52	26.0	44.45	4.76	6.35

All dimensions in millimetres.