

UNEQUAL ANGLES

BS4360/43A &

SABS 1431/ S355



NOMINAL SIZE mm	THEORETICAL MASS kg/m	PAINT AREA m ² /ton	LENGTHS AVAILABLE			
			6m	9m	11m	13m
65 x 50 x 6	5,16	43,54		X	X	X
65 x 50 x 8	6,75	33,31				X
75 x 50 x 6	5,65	43,21	X	X	X	X
75 x 50 x 8	7,39	33,02		X		X
80 x 60 x 6	6,37	42,91		X	X	X
80 x 60 x 8	8,34	32,73		X		X
90 x 65 x 6	7,07	42,86		X	X	X
90 x 65 x 8	9,29	32,64		X		X
90 x 65 x 10	11,40	26,50				X
100 x 65 x 8	9,94	32,32		X	X	X
100 x 65 x 10	12,30	26,23				X

NOMINAL SIZE mm	THEORETICAL MASS kg/m	PAINT AREA m ² /ton	LENGTHS AVAILABLE			
			6m	9m	11m	13m
100 x 75 x 6	8,04	42,44		X	X	X
100 x 75 x 8	10,57	32,29		X	X	X
100 x 75 x 10	13,04	26,18		X		X
100 x 75 x 12	15,44	22,11				X
125 x 75 x 8	12,16	32,11		X	X	X
125 x 75 x 10	15,02	26,00		X		X
125 x 75 x 12	17,81	21,92				X
150 x 75 x 10	16,98	25,94		X	X	X
150 x 75 x 12	20,17	21,34		X		X
150 x 75 x 15	24,83	17,74				
150 x 90 x 10	18,18	25,84		X	X	X
150 x 90 x 12	21,60	21,75				X
150 x 90 x 15	26,62	17,64				X

CHANGE OF SPECIFICATION SANS 1431

The SANS 1431 - Weldable Structural Steels will be scrapped and replaced by the Euronorm specification EN 10025. This decision was taken by the SC512.20E Engineering Materials Ferrous Metals Committee at a recent meeting at SABS. The process of specification change is expected shortly and will allow South Africa to be brought in line with international norms, thereby reducing confusion in the structural steel industry.

This means that the 300WA and 350WA structural steel grades will become redundant and be replaced by S275J and S355J respectively. The obsolete specification BS4360 grade 43A and 50B is also popular in the local market. Below is an abbreviated table which lists some of the comparative properties of S275J compared to 300WA/43A and S355J compared to 350WA/50B (for plate up to 16mm thick).

PROPERTY	S355	43A	S275J	350WA	50B	S355J
Min Yield (MPa)	300	275	275	350	355	355
UTS (Min/Max)(MPa)	450/620	430/580	410/560	480/650	490/640	470/630
Elongation (Min)	24%	22%	23%	22%	20%	22%

(The chemical composition and CE is available in the EN10025 specification and SANS 1431.)

There is good similarity between the 350WA/50B and the S355J specification. However, there are some significant differences between 300WA and S275J, which is closer to grade 43A. These differences may affect the processing and application of the material.

Please note that BS4360 Grade 43A and 50B has been superseded by BS EN 10025 about 15 years ago. Although the material is still produced by local moulds, the material specification is actually obsolete and specifiers should try and move away from these grades.

