



scaw

METALS GROUP



Wire and Strand

Construction Products

ASTM A416 ASTM A421



*Experience
Matters.*



WIRE & STRAND

ASTM A416 Low Relaxation Grade 7 - Wire Strand

Imperial	Nominal Diameter (in)	Breaking Strength (lbf)	Nominal Steel Area (in ²)	Nominal Weight (lb/1000ft)	Minimum Load at 1% Extension (lbf)
	Grade 250	3/8	20 000	0,080	272
7/16		27 000	0,108	367	24 300
1/2		36 000	0,144	490	32 400
0,600		54 000	0,216	737	48 600
Grade 270	3/8	23 000	0,085	290	20 700
	7/16	31 000	0,115	390	27 900
	1/2	41 300	0,153	520	37 170
	0,600	58 600	0,217	740	52 740
Metric	Nominal Diameter (imm)	Breaking Strength (kN)	Nominal Steel Area (mm ²)	Nominal Mass (kg/1000m)	Minimum Load at 1% Extension (kN)
	Grade 250	9,53	89,0	51,61	405
11,11		120,1	69,68	548	108,1
12,70		160,1	92,90	730	144,1
15,24		240,2	139,35	1094	216,2
Grade 270	9,53	102,3	54,84	432	92,1
	11,11	137,9	74,19	582	124,1
	12,70	183,7	98,71	775	165,3
	15,24	260,7	140,00	1 102	234,6

ASTM A421 Prestressing Wire

Imperial	Nominal Diameter (in)	Minimum Tensile Strength (psi)		Minimum Stress (psi) at 1% Extension	
		Type BA	Type WA	Type BA	Type WA
	0,192	-	250 000	-	212 500
	0,196	240 000	250 000	204 000	212 500
	0,250	240 000	240 000	204 000	204 000
	0,276	235 000	235 000	199 750	199 750
Metric	Nominal Diameter (in)	Minimum Tensile Strength (MPa)		Minimum Stress (MPa) at 1% Extension	
		Type BA	Type WA	Type BA	Type WA
	4,88	-	1 725	-	1 465
	4,98	1 655	1 725	1 407	1 465
	6,35	1 655	1 655	1 407	1 407
	7,01	1 620	1 620	1 407	1 377



Wire and Strand
60 Strachen Street, Germiston, 1400, South Africa
PO Box 52, Germiston, 1401, South Africa

Tel: +27 (0) 11 876 2600
Fax: +27 (0) 11 876 2700/2702
Email: info@scaw.co.za
www.scaw.co.za





WIRE & STRAND

Product and Development

Established in 1921, the Scaw Metals Group operates two steel wire, strand and rope manufacturing plants on the outskirts of Johannesburg, South Africa. A significant proportion of the Wire and Strand operation is wire and strand for the construction industries. These products are marketed and sold in many countries of the world. The Division is equipped with two modern low relaxation strand lines, two state-of-the-art low relaxation wire lines and a plastication line for the sheathing of tendons. The wire product range consists of plain, indented and crimped PC wire in the stress relieved condition. Stranded products include low relaxation seven wire strand which may be bright, plastic sheathed, galvanised, compact or indented.

The Germiston Wire and Strand operation has three major product lines: prestressed concrete wire and strand, mining commodity rope and high carbon wire. Prestressed concrete strand has been supplied to many prestigious projects worldwide, including the Rama VIII Bridge in Thailand, the Hong Kong Airport Project and the Mandela Bridge in South Africa.

The wire, strand, rope and chain operations support their products through a network of service centres that are staffed by trained specialists to provide on-site technical support. These centres offer a range of testing and termination services and stock a wide range of wire rope and chain fittings, lifting equipment and related hardware.



Peace Project, Tel Aviv, Israel



The Rama VIII Cable Stay Bridge - Bangkok, Thailand



Nelson Mandela Bridge Johannesburg, South Africa



Wire and Strand
60 Strachen Street, Germiston, 1400, South Africa
PO Box 52, Germiston, 1401, South Africa

Tel: +27 (0) 11 876 2600

Fax: +27 (0) 11 876 2700/2702

Email: info@scaw.co.za

www.scaw.co.za