

REINFORCING STEEL

For every structural need

RMS supplies high-quality reinforcing steel in both cut-and-bend and standard stock lengths to meet the needs of any project.



Technical

Diameter	Area m ²	Mass Weight P/M	Coils Available	Straights Available
Y6/R6	28.3	0.222		✓
Y8/R8	50.3	0.695	✓	✓
Y10/R10	78.5	0.617	✓	✓
Y12/R12	113	0.888	✓	✓
Y16/R16	201	1.58	✓	✓
Y20/R20	314	2.47		✓
Y25/R25	491	3.85		✓
Y32/R32	802	6.31		✓
Y40/R40	1260	9.86		On Request

Design & Detailing Criteria

Bar Spacing and Sectional Areas per Metre

Diam	Each	Spacing of Bars (mm)											
mm	mm ²	50	75	80	100	125	150	175	200	225	250	275	300
8	50.3	1010	671	628	503	402	335	287	252	223	201	183	167
10	78.5	1570	1046	982	785	628	523	448	393	349	314	285	261
12	113.0	2260	1506	1414	1130	904	753	645	565	502	452	410	376
16	201.0	4020	2679	2512	2010	1608	1339	1148	1005	892	804	730	669
20	314.0	6280	4186	3927	3140	2512	2091	1793	1570	1394	1256	1140	1046
25	491.0	9820	6544	6136	4910	3928	3270	2804	2455	2180	1964	1782	1635
32	804.0	16100	10717	10050	8040	6432	5355	4591	4020	3570	3216	2919	2677
40	1260.0	25100	16796	15700	12600	10080	8392	7195	6300	5594	5040	4574	4198

Mass per square metre for bars in one direction at various spacings (KG/m²)

Diam	Each	Mass / Metre	Bar Spacing (mm)									
mm	mm²	Mass (kg/m)	75	100	125	150	175	200	225	250	275	300
8	50.3	0.395	5.261	3.946	3.157	2.631	2.255	1.973	1.754	1.578	1.435	1.315
10	78.5	0.617	8.22	6.165	4.932	4.11	3.523	3.083	2.74	2.466	2.242	2.055
12	113.0	0.888	11.84	8.878	7.103	5.919	5.073	4.439	3.946	3.551	3.228	2.959
16	201.0	1.58	21.04	15.78	12.63	10.52	9.02	7.89	7.02	6.31	5.74	5.26
20	314.0	2.47	32.88	24.66	19.73	16.44	14.09	12.33	10.96	9.87	8.97	8.22
25	491.0	3.85	51.38	38.53	30.83	25.69	22.2	19.27	17.13	15.14	14.01	12.84
32	804.0	6.31	84.18	63.13	50.51	42.09	36.08	31.57	28.03	25.25	22.96	21.04
40	1260.0	9.86	131.5	98.65	78.92	65.76	56.37	49.32	43.84	39.46	35.87	32.88

Standard Material Specifications

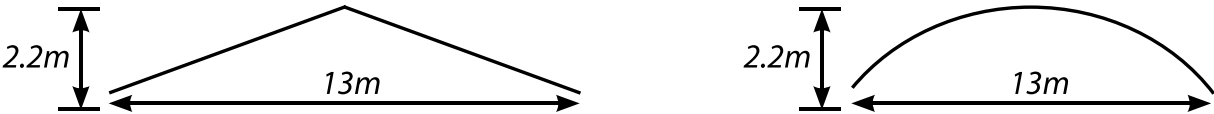
Our reinforcing steel bars (rebar) are supplied in the standard grades and diameters listed below. Both grades are available in standard lengths of 12m and 13m.

Grade	Letter Code	8	10	12	16	20	25	32	40
High Tensile Steel (SANS 920:2011 – 450MPa) – deformed	Y	8	10	12	16	20	25	32	40
Mild Steel (SANS 920:2011 – 250MPa) – smooth	R	8	10	12	16	20	25	32	40

Customised dimensions are available on request. Please contact us to discuss your specific requirements.

Transportation

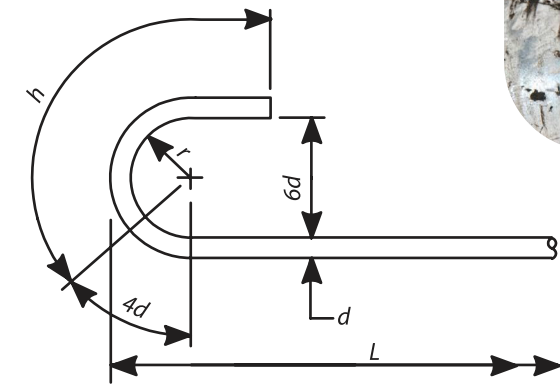
For transportation purposes, bars should not exceed the following:



Cutting & Bending Tolerances
Critical Radii

Nominal Size of Bar (mm)	Critical Radius (m)
8	2.5
10	3
12	3.5
16	5
20	7
25	17
32	43

Hook Allowance



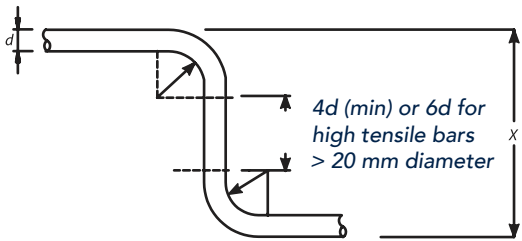
Cutting length of bar equals L + h



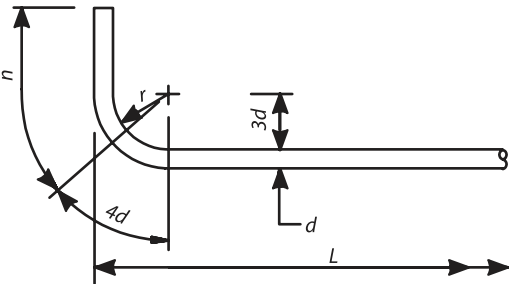
Hook, Bend, and Radius Allowances

For high-yield and cold-worked steel bars in compliance with SANS 920

Nominal Size of Bar	d	6	8	10	12	16	20	25	32	40
Hook Allowance	h	100	100	100	100	100	100	100	100	100
Bend Allowance	n	100	100	100	100	100	100	100	100	100
Radius	r	18	24	30	36	48	60	75	96	120



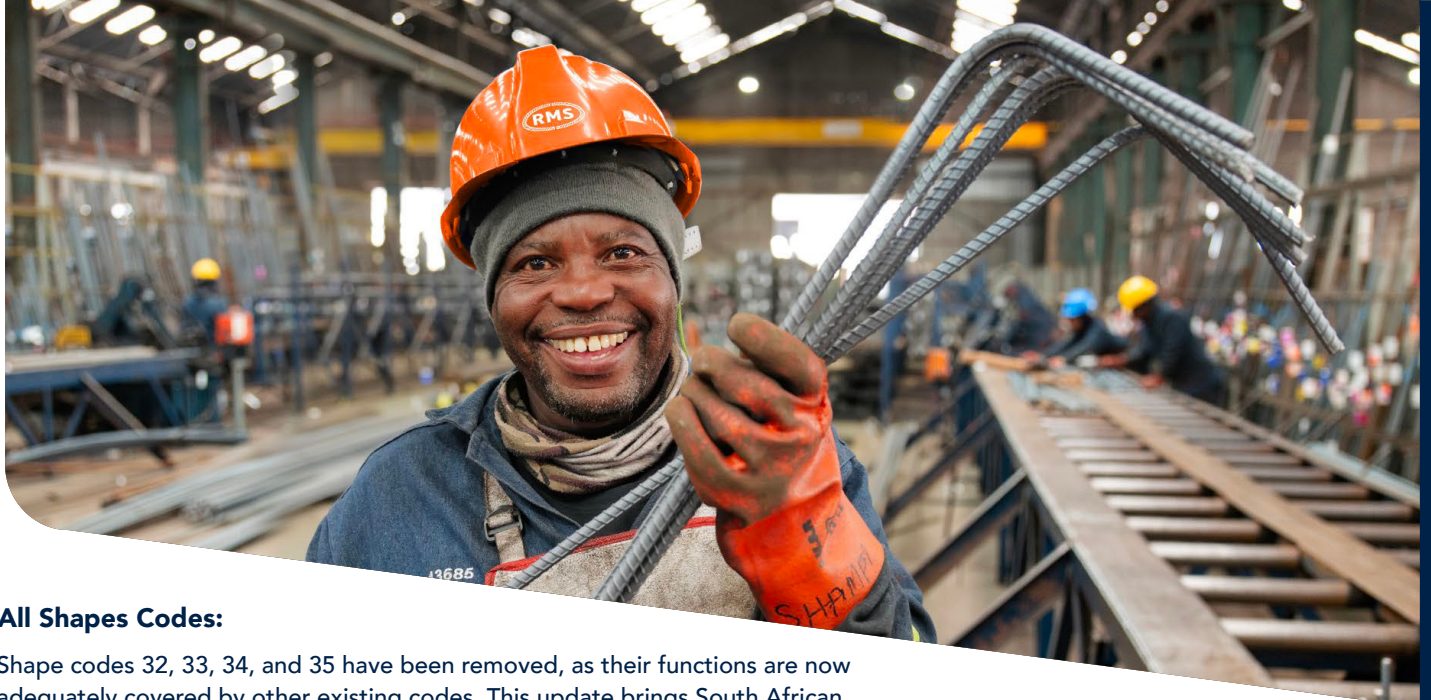
Example of bar with more than one bend



Cutting length of bar equals L + h

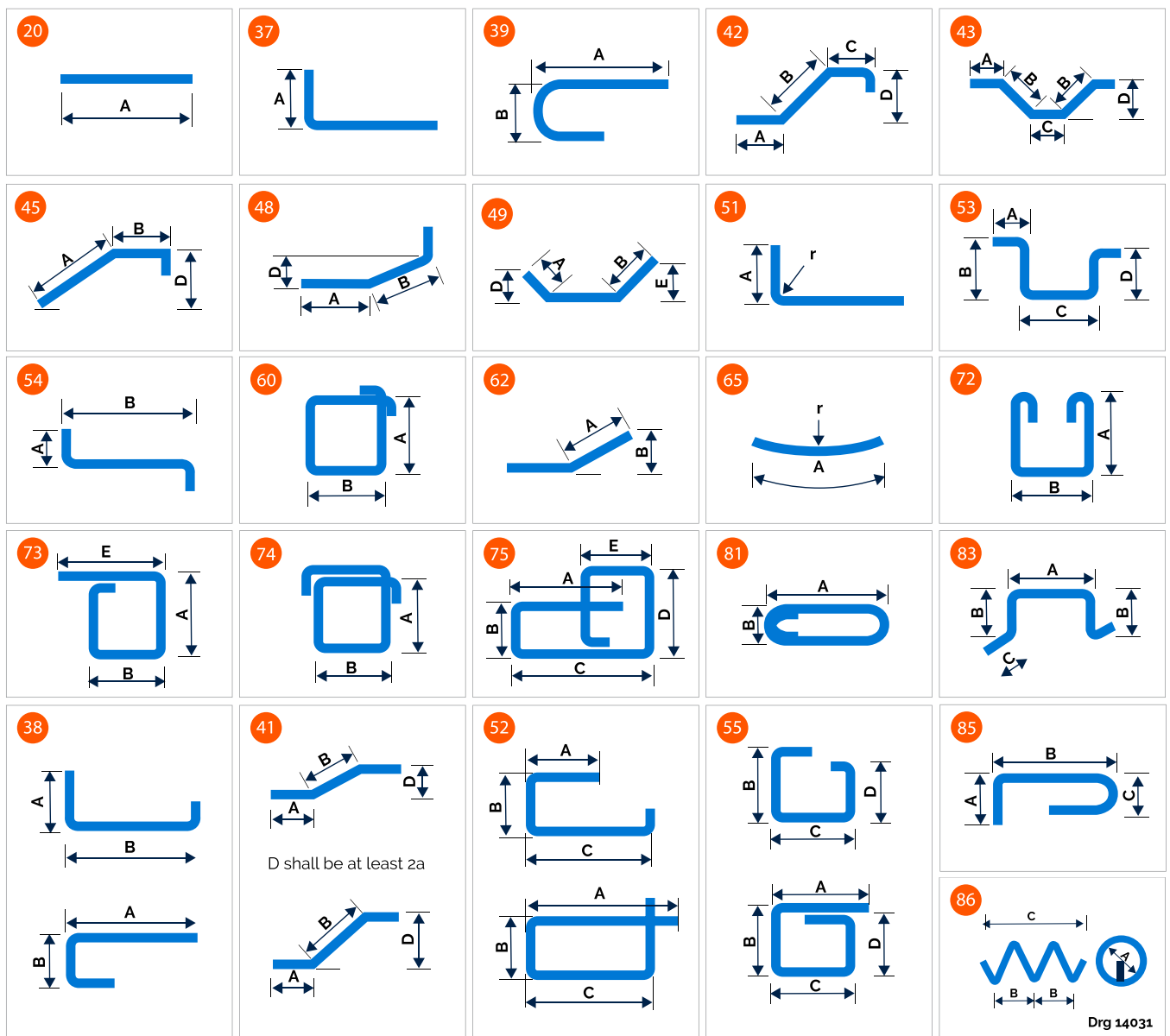
Important Considerations:

- **Cut & Bend is not always faster:**
While it saves time on-site, Cut & Bend requires accurate bending schedules and processing time. Early planning helps ensure timely delivery or collection.
- **Stock lengths are not only for small projects:**
Stock lengths suit projects of all sizes, especially those requiring on-site flexibility or phased reinforcement.
- **We do not manufacture steel:**
RMS is a steel supplier and processor - we source quality steel, cut and bend to spec, and ensure all products meet both South African and British standards.
- **Export and Cross-Border Supply:**
Stock lengths are available for export across Southern Africa. Cut & Bend orders are also available to clients in Southern Africa; however, these must be collected from our facility, as we do not deliver Cut & Bend orders cross-border due to handling and transport constraint



All Shapes Codes:

Shape codes 32, 33, 34, and 35 have been removed, as their functions are now adequately covered by other existing codes. This update brings South African shape codes in line with British standards.



Reinforcing & Mesh Solutions
CREATING SOLUTIONS TOGETHER

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