

**An anchor grip flooring  
that beholds you.**

**ANTISKID**  
Aluminium Gratings

A product of West Coast Gratings Pvt. Ltd.



WEST-COAST GRATINGS PVT. LTD was formed in 1981 as a small unit with a specific objective of manufacturing industrial floor gratings and other allied products specifically to meet the demand of international market.

We are professional manufacturers of gratings since 1965. The chairman with his technical expertise and 50 years of rich experience is outstanding in designing and manufacturing of gratings and other structural engineering products. We manufacture quality products of international standard for our world wide customers and international reputed consultants.

WEST-COAST has been active and catering to the needs of the various industries in the field of bulk handling projects, systems and its related equipments. The overall reliability and performance of our products are guaranteed by the fact that all the products are manufactured in house with Quality Assurance Plan.

WEST-COAST, with a professional experience, also grew in that period, leaving its foot print firmly behind as years passed by. From a team of five, today we are a dedicated force of fifty. From one small unit to two major production centers. From one product to a multi-product, multifaceted company. We have come a long way. This single minded approach and dedication to strive for the best has put us to where we are today. Be it any industry, power, fertilizer, chemical, petrochemicals or offshore platforms, we feel proud that our products have been supplied and accepted by all prestigious projects countrywide and world wide.

Our rich experience many a times puts us in a unique position of being a consultant cum vendor, when our input, by way of advise on designs is called for. This has helped our clients in cutting costs and getting a superior designed techno-economic product in the bargain. Due to this interaction, most of the times we are a natural choice, once these products are called for. Our brand names ANTI-SKID / SUPRA-LOCK / ANCHOR / HI-FLOW / TUFTILES have become synonymous with the product itself.

We have a long way to go with future looking brighter than ever as we are constantly gearing ourselves for new challenges of tomorrow.



**'ANTI-SKID' GRATINGS** : Complete range of steel open grid electro forge flooring for use on platforms in industries like power plants, petrochemical complexes, fertilizer plants, etc. Gratings are available in galvanized, painted aluminum alloy and stainless steel.

**ANTISKID**  
Electro forge Gratings

**'SUPRALOCK' GRATINGS** : Specially designed serrated type of electro forge gratings for off-shore platforms. The design of the gratings is such to provide additional grip and also withstand lateral loads. 'Supralock' gratings are available with galvanized duly painted with polyurethane based protective paint for extra corrosive resistant.

**supra  
LOCK**

**'ANCHOR' STAIRTREADS** : Complete range of stairway systems form a part of staircase. Stairtreads are either plain serrated with or without nozing and carrier plates.

**anchor**  
STAIR TREADS

**MOTORWAY GRATINGS AND ANGLE FRAMES** : Angle frames & the motorway gratings are for covering of storm water drain on highways, motorways, freeways, tct.

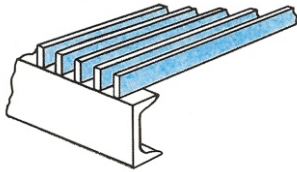
**REACTOR GRATINGS** : We design and manufacture reactor gratings which are required for supporting catalyst in reactor vessels. The design has been made in consideration of operating temperature of 590° C, manufactured for special stainless steel alloy such as Ss321/ Ss947/ SS316L.

**SEA WATER INTAKE GRILLS** : We design and supply special grids manufactured from Cupro - nickel or SS 316 S33 for sea water intake gates for blocking a sea sludge.

# GRATING TERMINOLOGY

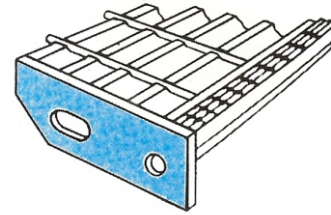
## LOAD BEARING BAR

A load bearing member spanning between supports.



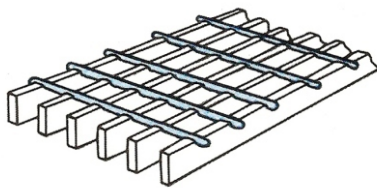
## END PLATE

A plate fixed to a stair or ladder tread for attaching to the stringer.



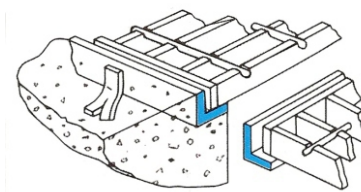
## TRANSVERSE BAR

A member fixed at right angle to the load-bearing bars to provide lateral restraint.



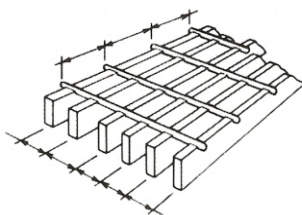
## CURB ANGLE

A member fixed to concrete or supporting steelwork at the perimeter of a flooring.



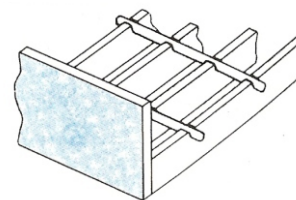
## PITCH

The distance center to center of load bearing bars or centers between points of lateral support to load bearing bars.



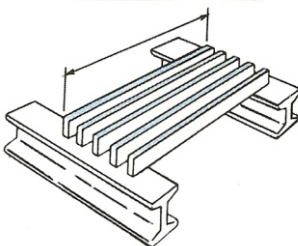
## KICKING PLATE

A flat bar around the edge of a flooring panel and projecting above the top of the load bearing bars.



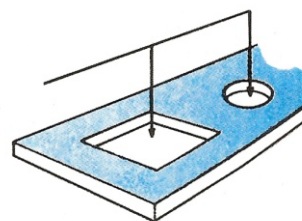
## LENGTH

The over all dimension of a flooring panel with the load bearing bars.



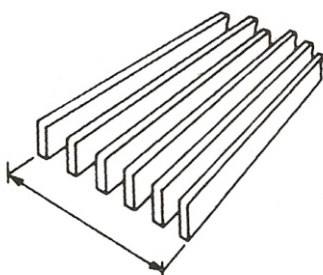
## NET AREA

The actual area of the flooring excluding cut out areas.



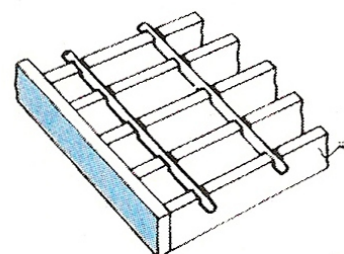
## WIDTH

The over all dimensions of a flooring panel measured at 90° to the load bearing bars.




## BANDING BAR

The bar of section fixed to the edges of a flooring panels flush with the top of the load bearing bar.





A photograph of a yellow industrial walkway. The walkway features a series of parallel flat load-bearing bars spaced evenly, with twisted bars welded to the top surface. The walkway is bordered by yellow handrails. The background shows a complex industrial structure with various pipes and beams.

West Coast standard open grating comprises of a series of parallel flat load bearing bars stood on end and equi-spaced with either indented round or square twisted bars duly welded into the top surface of the load bearing bars primarily to keep them upright.



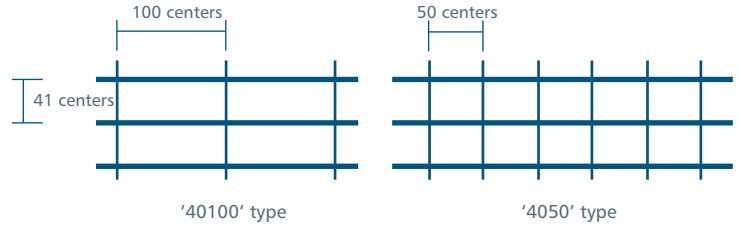




# OPEN BAR MILD STEEL ELECTRO FORGE GRATINGS

## SAFE WORKING LOADS & DEFLECTION TABLES

West Coast standard open grating comprises of a series of parallel flat load bearing bars stood on end and equi-spaced with either indented round or square twisted bars duly welded into the top surface of the load bearing bars primarily to keep them upright.

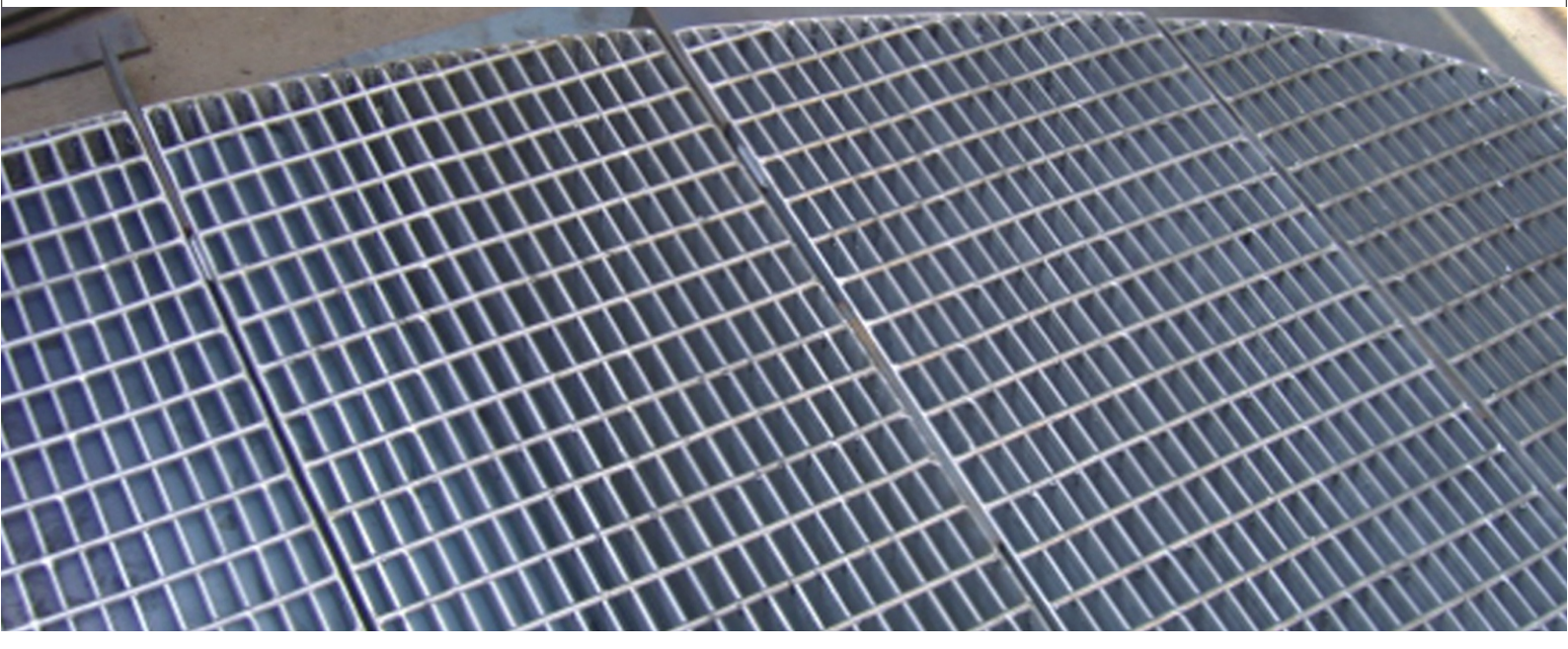


**"40" Type Grating with load bearing bars @ 41 mm centers & Cross bars @ 100 or 50 mm centers**

S.C.F. Is the serrated conversion factor by which the safe loads and deflections must be multiplied to obtain those for the equivalent overall load bearing bar depth with serrated top surface.

Note :  $\delta$  is a deflection in mm.  
All loads are in KiloNewton i.e. KN

Max. Clear span for Pedestrian Loading	$\delta$ (mm)	Bearing Bar (mm)		CLEAR SPAN IN MILLIMETRES													S.C.F.		Approx. finished wt. Kg/m <sup>2</sup>					
				300	450	600	750	900	1050	1200	1350	1500	1650	1800	1950	2100	U.D.L.	$\delta$						
a b c	1083 914 798	5.42 4.57 3.99	20x3	kN/m <sup>2</sup> (mm)	70.40 0.75	31.29 1.69	17.60 2.99	9.04 3.75	5.23 4.50															15.5
a b c	1354 1142 998	6.77 5.71 4.99	25x3	kN/m <sup>2</sup> (mm)	110.00 0.60	48.89 1.35	27.50 2.40	17.60 3.74	10.21 4.50	6.43 5.25														18.48
a b c	1625 1370 1197	8.12 6.85 5.99	30x3	kN/m <sup>2</sup> (mm)	158.40 0.49	70.40 1.12	39.60 1.99	25.34 3.11	17.60 4.49	11.12 5.25	7.45 6.00	5.23 6.75												21.76
a b c	1896 1599 1397	9.48 7.99 6.98	35x3	kN/m <sup>2</sup> (mm)	215.60 0.43	95.82 0.96	53.90 1.71	34.50 2.67	23.96 3.85	17.60 5.24	11.82 6.00	8.31 6.75	6.05 7.50											25.11
a b c	2124 1827 1596	10.00 9.14 7.98	40x3	kN/m <sup>2</sup> (mm)	281.60 0.37	125.16 0.84	70.40 1.50	45.06 2.34	31.29 3.37	22.99 4.58	17.60 5.98	12.40 6.75	9.04 7.50	6.79 8.25	5.23 9.00									28.39
a b c	1284 1083 946	6.42 5.42 4.73	20x5	kN/m <sup>2</sup> (mm)	117.33 0.75	52.15 1.68	29.33 2.99	15.06 3.75	8.72 4.50	5.49 5.25														22.95
a b c	1605 1354 1183	8.03 6.77 5.91	25x5	kN/m <sup>2</sup> (mm)	183.33 0.60	81.48 1.35	45.83 2.39	29.33 3.74	17.02 4.50	10.72 5.25	7.18 6.00	5.04 6.75												28.95
a b c	1926 1625 1419	9.60 8.12 7.10	30x5	kN/m <sup>2</sup> (mm)	264.00 0.50	117.33 1.12	66.00 1.99	42.24 3.12	29.33 4.49	18.53 5.25	12.41 6.00	8.72 6.75	6.35 7.50											33.49
a b c	2183 1896 1656	10.00 9.48 8.28	35x5	kN/m <sup>2</sup> (mm)	359.33 0.43	159.70 0.96	89.83 1.71	57.49 2.67	39.93 3.85	29.33 5.24	19.17 6.00	13.84 6.75	10.09 7.50	7.58 8.25	5.84 9.00									38.70
a b c	2413 2124 1893	10.00 10.00 9.46	40x5	kN/m <sup>2</sup> (mm)	469.33 0.37	208.59 0.84	117.33 1.50	75.09 2.34	52.15 3.37	38.31 4.58	29.33 5.98	20.66 6.75	15.06 7.50	11.32 8.25	8.72 9.00	6.86 9.75	5.23 10.00							43.91
a b c	2852 2510 2268	10.00 10.00 10.00	50x5	kN/m <sup>2</sup> (mm)	733.33 0.30	325.93 0.67	183.33 1.20	117.33 1.87	81.48 2.69	59.86 3.67	45.83 4.79	36.21 6.06	29.33 7.48	22.10 8.25	17.02 9.00	13.39 9.75	10.20 10.00							54.32





# ANTI-SKID ELECTRO FORGE GRATINGS FIXING METHODS AND FINISHES

It is important to note that when there is no lateral restraint provided by the support structure, a minimum of four clips per panel must be used to restrain floor panels. Where larger panels are to be fixed it is advisable to use extra clips on any available intermediate supports.

## FINISHES

ANTI-SKID electro forge gratings are available with following finishes :

**Self Colour :** This gives quicker deliveries to the customers who fabricate their own cut out panels.

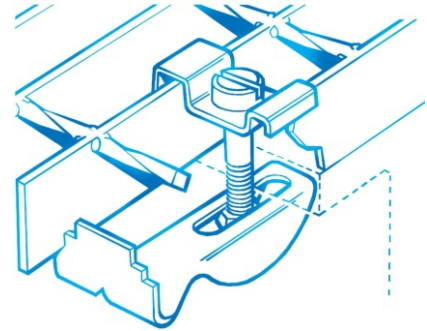
**Red Oxide:** This is basically used as a primer coat when additional paint finishes are required.

**Galvanized:** For corrosive and damp situations, ANTI-SKID electro forge gratings are galvanized to BS EN 1461:1999 giving a minimum coating of zinc of  $610\text{g/m}^2$  for sections 5mm and above; and  $460\text{g/m}^2$  for sections below 5mm. ANTI-SKID electro forge gratings can also be galvanized to confirm to ASTM 123 giving a coating minimum of  $610\text{g/m}^2$  for sections 5mm and above, and a coating minimum of  $550\text{g/m}^2$  for sections below 5mm.

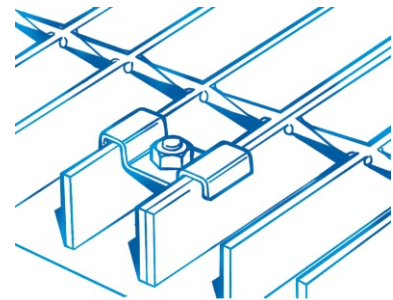
Other finishes are available on request.

**Stainless Steel:** When stainless ANTI-SKID electro forge gratings are requested; It should be specified from correct SS alloy like SS 304 / SS 316L / SS316L etc.

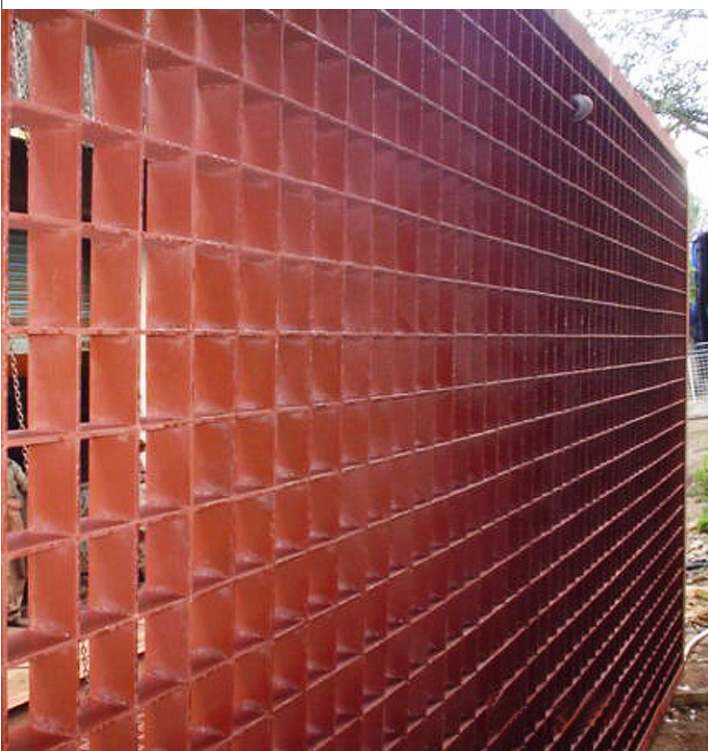
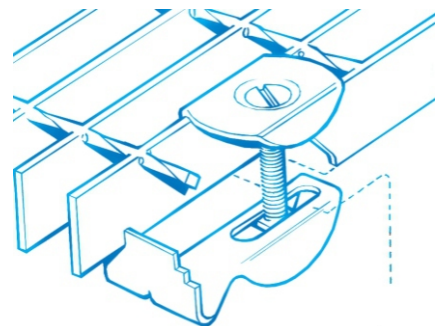
A pressed steel saddle clamp constructed in such a way that fixing is possible from above.



An 8mm dia. Welded stud with pressed top clip providing an extremely secure fixing method



Pressed clip is used for securing floor with smaller mesh sizes (21 & 25 mm pitch load bearing bars)



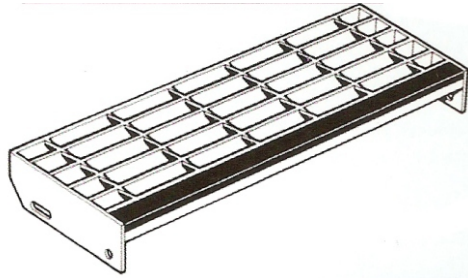
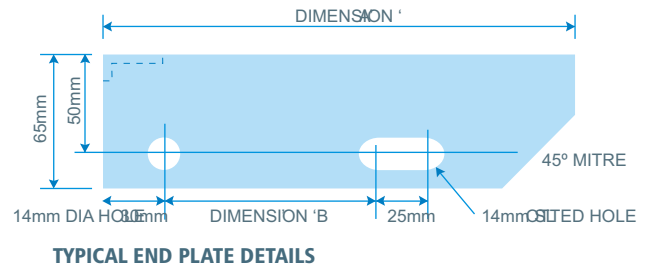


# ANTI-SKID ELECTRO FORGE GRATINGS FIXING METHODS AND FINISHES

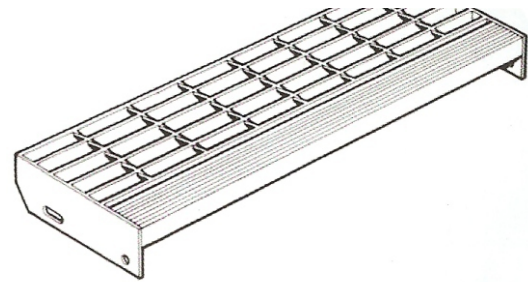


In addition to this, an electro forge stair treads are supplied with a variety of different non-slip serrated bars. The normal bar arrangements for stair treads are 41mm or 30mm pitch.

The tables below give all necessary details for the most available stair treads.



ABRASNR NOISING : ST-1



MS CHECKERED PLATE NOISING : ST-2

## MAXIMUM LENGTH

Load Bearing Bar Section (mm)	41mm Pitch		30mm Pitch	
	Plain	Serrated	Plain	Serrated
20 x 5	725	625	825	725
25 x 3	700	625	850	750
25 x 5	1000	900	1150	1050
30 x 5	1000	900	1150	1050
30 x 5	1275	1200	1400	1325
35 x 3	1250	1200	1375	1300
35 x 5	1500	1425	1625	1550

## STAIR TREAD WIDTH AND FIXING HOLE CENTRES

		Dim 'A'	Dim 'B'	Dim 'A'	Dim 'B'	Dim 'A'	Dim 'B'	Dim 'A'	Dim 'B'
41mm Pitch	Stairtreads ST-1	160	75	201	100	242	100	283	100
	Stairtreads ST-2	194	75	235	100	276	100	317	100
30mm Pitch	Stairtreads ST-1	187	75	217	100	247	100	277	100
	Stairtreads ST-2	191	75	221	100	251	100	281	100



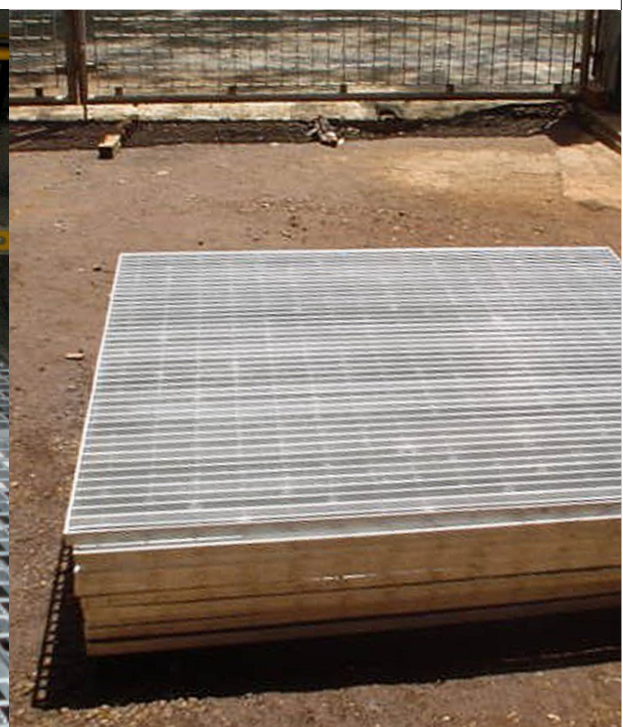
# OPEN BAR ALUMINIUM ALLOY GRATINGS



LOAD AND DEFLECTION TABLE- LOAD BEARING BARS AT 41MM PITCH ( MESH 41 X 100 )

Load Bearing Bar (mm)	W	S		CLEAR SPAN (MM) = (L)										
		Serration Factor		All loads are in Kilo Newton (KN)										
		For Load	For Defl.	300	450	600	750	900	1050	1200	1350	1500	1650	
40x5	17.23	0.93	1.12	U	360.68	141.84	59.84	30.64	17.73	11.17	7.48	5.25	3.83	2.88
				D	1.13	2.25	3.00	3.75	4.50	5.25	6.00	6.75	6.75	8.25
				C	54.10	36.07	22.44	14.36	9.97	7.33	5.61	4.43	3.59	2.57
				D	0.90	2.03	3.00	3.75	4.50	5.25	6.00	6.75	6.75	8.25
40x3	11.32	0.93	1.12	U	216.41	85.10	35.90	18.38	10.64	6.70	4.49	3.15	2.30	
				D	1.13	2.03	3.00	3.75	4.50	5.25	6.00	6.75	6.75	
				C	32.46	21.64	13.46	8.62	5.98	4.40	3.37	2.66	2.15	
				D	0.90	2.25	3.00	3.75	4.50	5.25	6.00	6.75	6.75	
35x5	15.37	0.91	1.15	U	268.40	91.05	38.41	19.67	11.38	7.17	4.80	3.37	2.46	
				D	1.31	2.25	3.00	3.75	4.50	5.25	6.00	6.75	6.75	
				C	40.26	25.61	14.40	9.22	6.40	4.70	3.60	2.85	2.30	
				D	1.05	2.25	3.00	3.75	4.50	5.25	6.00	6.75	6.75	
35x3	10.21	0.91	1.15	U	161.00	54.63	23.05	11.80	6.83	4.30	2.88			
				D	1.31	2.25	3.00	3.75	4.50	5.25	6.00			
				C	24.16	15.63	8.64	5.53	3.84	2.82	2.16			
				D	1.05	2.25	3.00	3.75	4.50	5.25	6.00			
30x5	13.53	0.89	1.19	U	182.63	54.11	22.83	11.69	6.76	4.26	2.85			
				D	1.50	2.25	3.00	3.75	4.50	5.25	6.00			
				C	28.46	15.22	8.56	5.48	3.80	2.80	2.14			
				D	1.25	2.25	3.00	3.75	4.50	5.25	6.00			
30x3	9.10	0.89	1.19	U	109.58	32.47	13.70	7.01	4.06	2.56				
				D	1.50	2.25	3.00	3.75	4.50	5.25				
				C	17.08	9.13	5.14	3.29	2.28	1.68				
				D	1.25	2.25	3.00	3.75	4.50	5.25				
25x5	11.69	0.87	1.23	U	97.28	28.82	12.16	6.23	3.60					
				D	1.50	2.25	3.00	3.75	4.50					
				C	18.24	8.11	4.56	2.92	2.03					
				D	1.50	2.25	3.00	3.75	4.50					
25x3	8.00	0.87	1.23	U	58.37	17.29	7.30	3.74						
				D	1.50	2.25	3.00	3.75						
				C	10.94	4.86	2.74	1.75						
				D	1.50	2.25	3.00	3.75						

WEST COAST has developed in-house design and methodology for manufacturing aluminium alloy gratings, which is extremely suitable for light load working platform for oil fields, refineries, water treatment and sewage plants, pulp and paper industries; where excessive corrosive environment exists. Due to inherent quality of aluminium blended with alloy material; aluminium alloy grating is extremely suitable for light weight and highly corrosive and saline atmosphere.







West Coast standard open grating comprises of a series of parallel flat load bearing bars stood on end and equi-spaced with either indented round or square twisted bars duly welded into the top surface of the load bearing bars primarily to keep them upright.





**WEST-COAST**

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