

Steellines Zambia

Welded Mesh
Product Catalog

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About Us



Steellines Zambia Ltd, is situated in Chinika Industrial area of Lusaka, the capital city of Zambia. We are the largest wire processing factory in Zambia, specializing in the production of wire products for the construction, security, agricultural, and mining sectors. Steellines Zambia is an all Zambian team of dedicated and enthusiastic workforce.

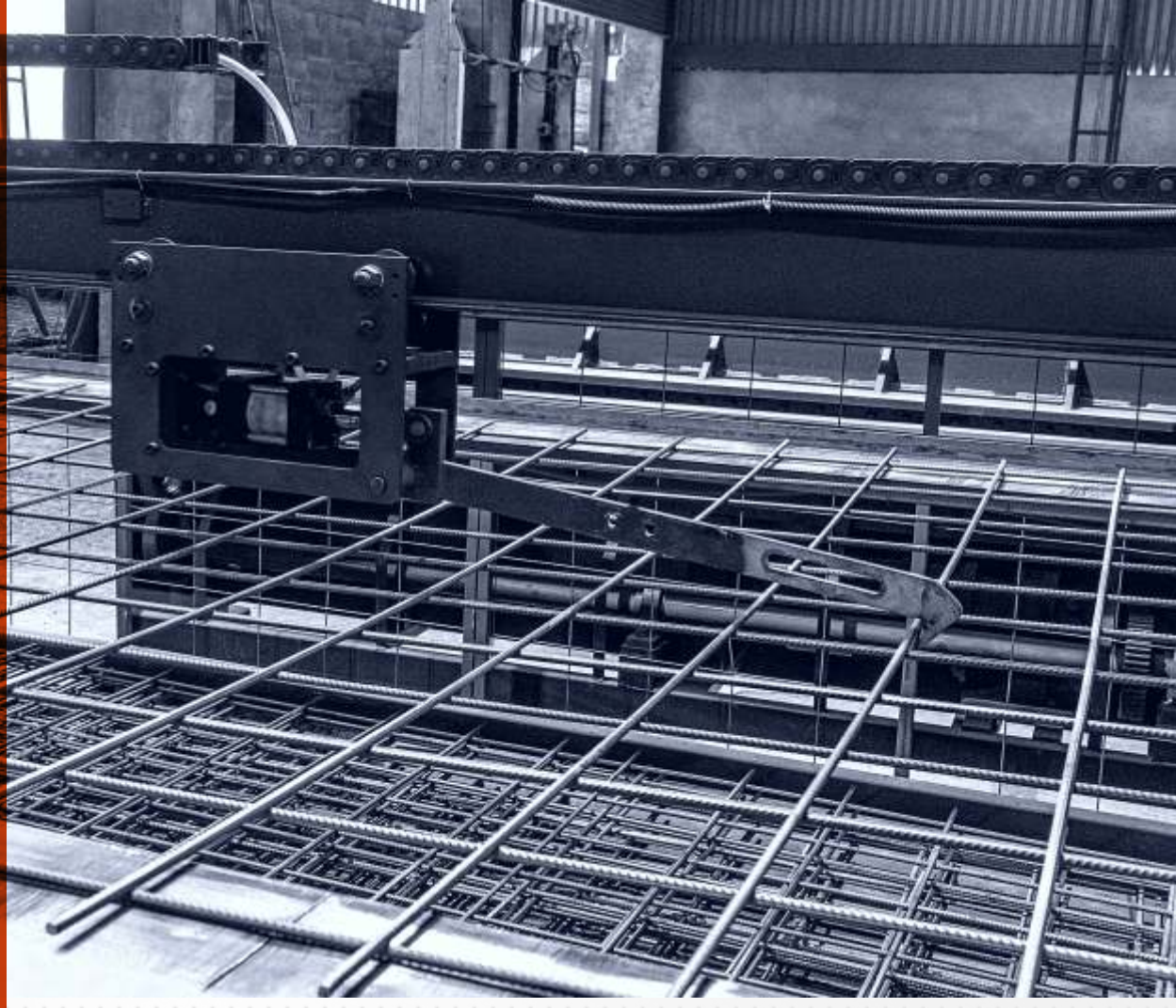
We have the experience of 3 generations, the technological know-how from the best manufacturers in the world, and alliances with top performing Steel companies in South Africa. Our dedicated sales team has established long-standing relationships with our customers, ranging from international mining houses, major construction companies and private domestic users. Whatever your wire needs, Steellines Zambia has the perfect solution for you.

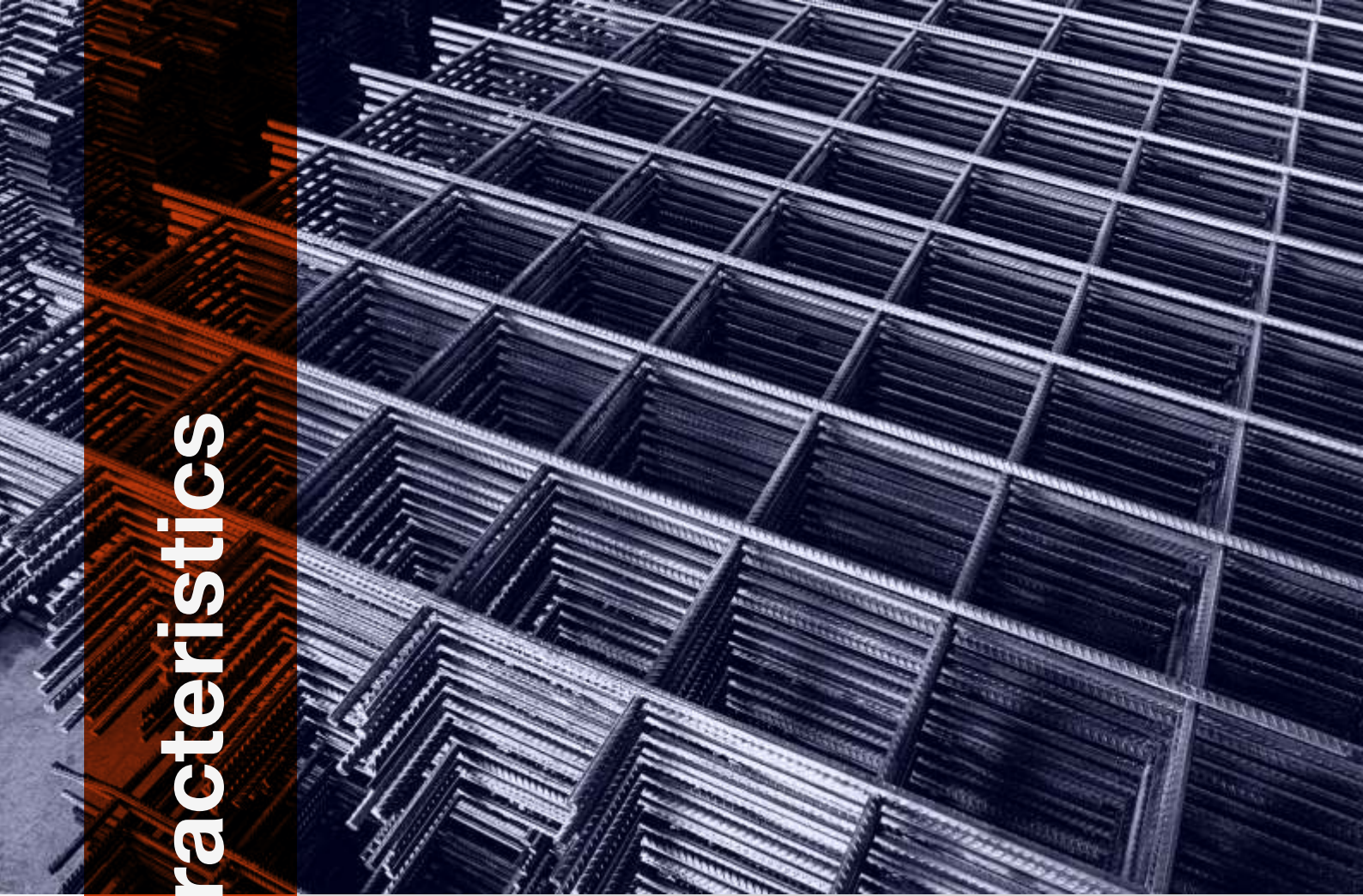


Location Map

Steellines Zambia is this country's first and only Customized Weld Mesh Reinforcement Manufacturer.

Reinforcement Mesh





Technical Characteristics

Steellines Zambia brings Welded Mesh Reinforcement (WMR) for the first time in Zambia with state-of-the-art European technology, to eliminate construction waste and save time in the construction of floor, roof concrete slabs and road pavements.

- ✓ Available with ribbed wire and deformed bars 3.0mm, 4.0mm, 5.0mm, 6.0mm, 8mm, 10mm, and 12mm.
- ✓ Customizable. Any spacing (Box Size) from 50mm to 300mm other sizes and configuration can be produced upon request.
- ✓ Wires are Cold Drawn from SAE1010 - able to achieve a minimum of 500mpa Yield Strength.
- ✓ No more wasteful and time-consuming. G.I. Wire binding or any other type of slab reinforcement.

Welded Mesh Reinforcement (WMR) sheets are manufactured out of cold-rolled ribbed wires with yield strength of 500 MPa.

The longitudinal and transverse wires and bars are electric-resistant welded by applying pressure and passing electric current at the intersection.

Welded Mesh Reinforcement (WMR) develops guaranteed shear strength of 240 MPa (35000PSI) at the intersection. This provides a huge anchoring effect in the slab concrete.

Construction Advantages



The bonding behavior of WWR is significantly enhanced than that of ordinary deformed bars.

As against the peripheral surface area which is responsible for bonding to concrete in the case of individual bars, the rigid mechanical interconnections by means of welds to cross wires are primarily responsible for stress transfer from concrete to steel and vice-versa in the case of WWR.

This behavior of positive mechanical anchorage is acknowledged in the specification of much lower lap splice lengths for WWR. This aspect can result in savings of steel vis-à-vis HYSD bars by making easy the option to use a combination of fabrics/ steel areas provided to achieve curtailment of reinforcement with easy and short splices.

The behavior of strong mechanical anchorage of the welds at each of the intersections imparts an immense deal of homogeneity to the R.C.C section as a whole. The two-dimensional uniform stress distribution of the fabric with the concrete achieves better plate behavior in the slab. WWR usage affords the possibility of using thinner wires at closer spacing. This serves most effectively in countering the non-load phenomena or strain-induced stresses due to shrinkage and temperature changes.

The close spacing of thinner wires and the two-way behavior of WWR minimizes the crack widths and preserves the structural integrity of the slab. WWR ensures up to 50% savings in construction labour and time in slab reinforcement work.

Applications



Drainage



Foundation



Slab-Works



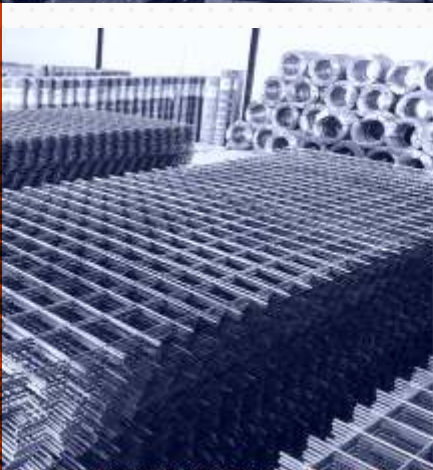
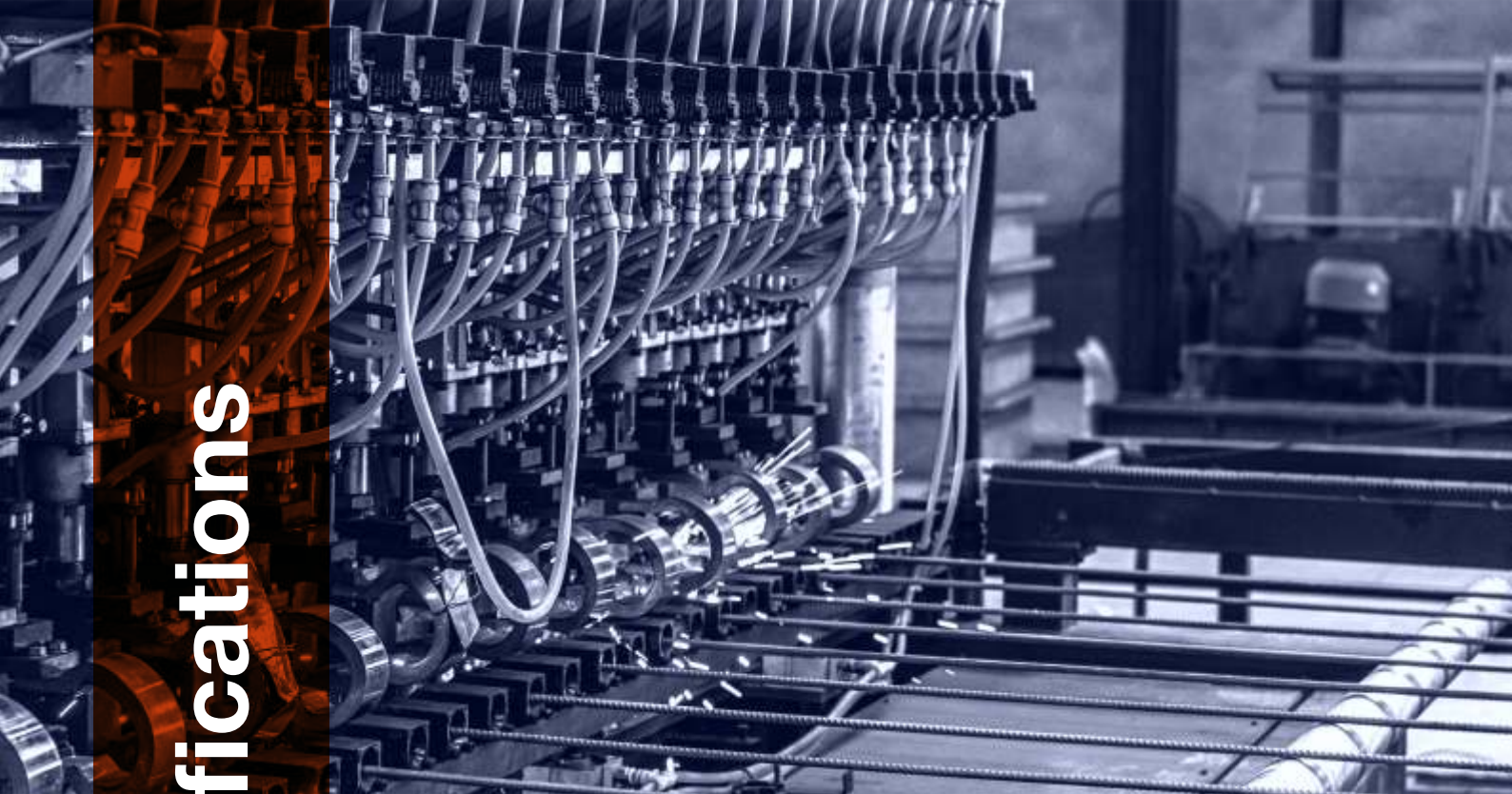
For Roads

Residential floor and slab works, easy and convenient for fast erection. No messy, unreliable and time-consuming G.I. wire tying or Black Wire tying.

Ground foundation where wire reinforcement is needed primarily for crack control, due to temperature and shrinkage.

Heavy industrial floors with vehicular loading.
Drainage's and Road works.

South African Specifications



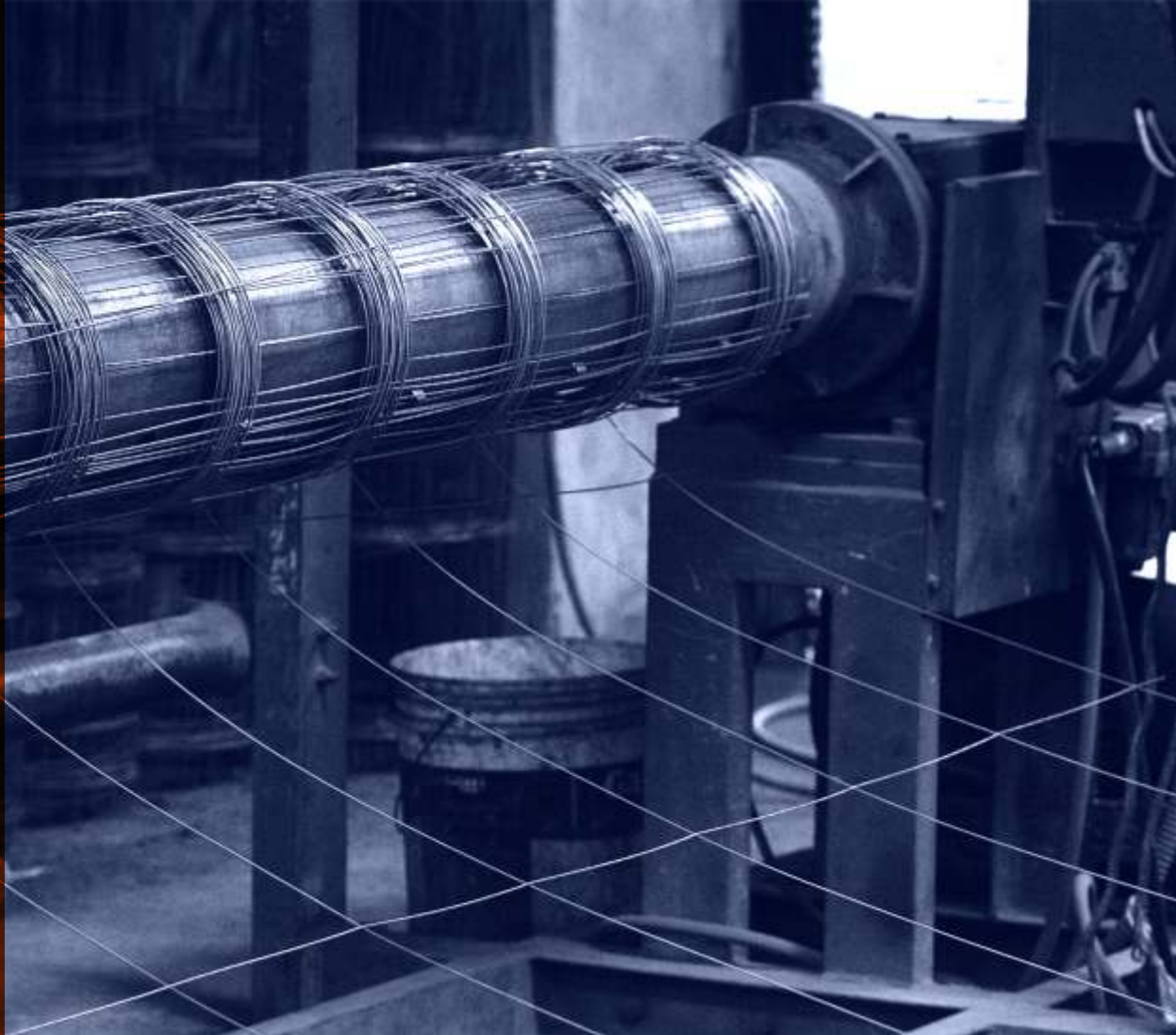
Mesh Types	Wire Diameter		Wire Pitch		Sheet	Rolls
	Longitudinal	Transverse	Longitudinal	Transverse		
A86 (104)	3.55	3.55	150	150	-	60mt
A257 (209)	5	5	150	150	6mt x 2.4mt	60mt
S156	3.55	3.55	100	100	6mt x 2.4mt	60mt
S200	4	4	100	100	6mt x 2.4mt	60mt
S100	4	4	200	200	6mt x 2.4mt	60mt
A98 (155)	5	5	200	200	6mt x 2.4mt	60mt
A142 (222)	6	6	200	200	6mt x 2.4mt	60mt
S193	5.6	5.6	200	200	6mt x 2.4mt	60mt
S245	6.3	6.3	200	200	6mt x 2.4mt	-
S311	7.1	7.1	200	200	6mt x 2.4mt	-
S395	8	8	200	200	6mt x 2.4mt	-
S500	9	9	200	200	6mt x 2.4mt	-
S617	10	10	200	200	6mt x 2.4mt	-
S746	11	11	200	200	6mt x 2.4mt	-
S888	12	12	200	200	6mt x 2.4mt	-

Other International Specifications



Mesh Types	Wire Diameter		Wire Pitch		Sheet	Rolls
	Longitudinal	Transverse	Longitudinal	Transverse		
Q84	4	4	150	150	-	60mt
Q98	5	5	200	200	6mt x 2.4mt	60mt
Q126	4	4	100	100	6mt x 2.4mt	60mt
Q188	6	6	150	150	6mt x 2.4mt	60mt
Q196	5	5	100	100	6mt x 2.4mt	60mt
Q283	6	6	100	100	6mt x 2.4mt	60mt
Q335	8	8	150	150	6mt x 2.4mt	60mt
Q424	9	9	150	150	6mt x 2.4mt	60mt
Q503	8	8	100	100	6mt x 2.4mt	-
Q524	10	10	150	150	6mt x 2.4mt	-
Q636	9	9	100	100	6mt x 2.4mt	-
Q787	10	10	100	100	6mt x 2.4mt	-

General Purpose Weld Mesh



✓ Hard Drawn

✓ Width 2.4mt

Mesh Types	Wire Diameter		Wire Pitch		Rolls
	Longitudinal	Transverse	Longitudinal	Transverse	
Z86	2.1	2.1	200	200	30/ 40/ 50mt
Z100	3.0/3.5/4.0mm	3.0/3.5/4.0mm	200	200	48mt
C86	2.1	2.1	200	400	40/ 50mt

Galvanized Weld Mesh

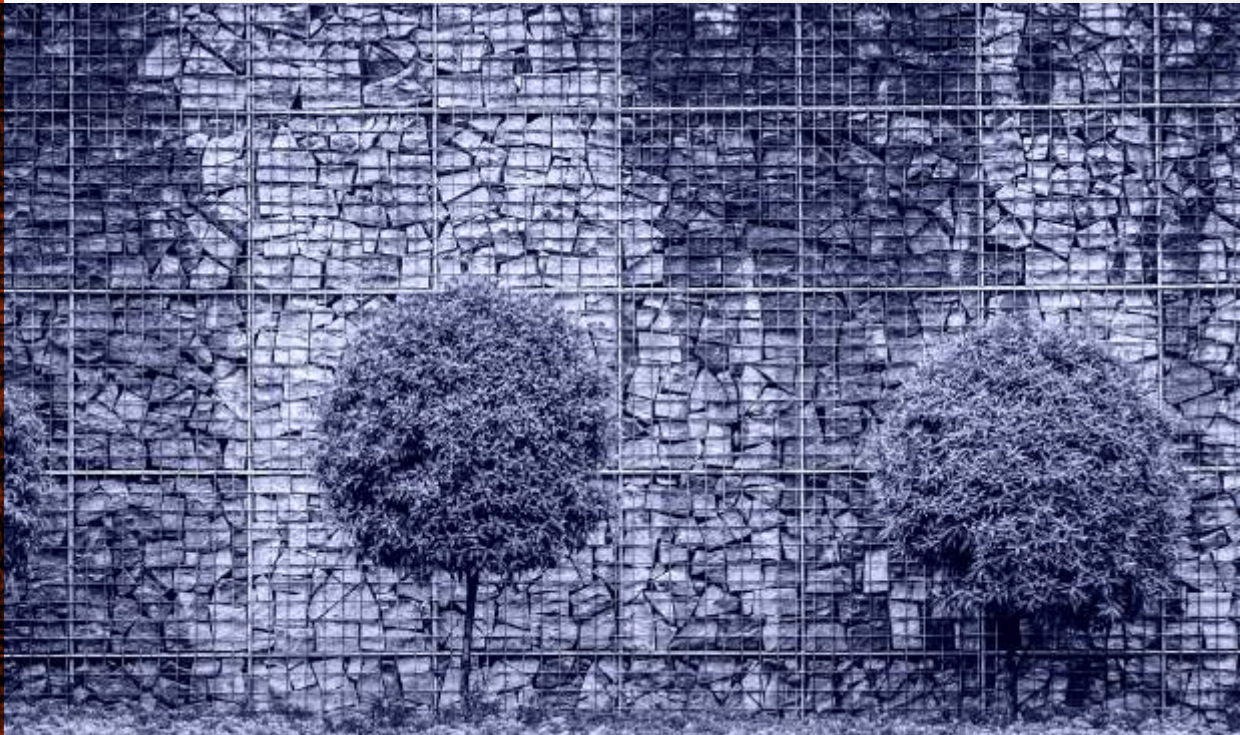
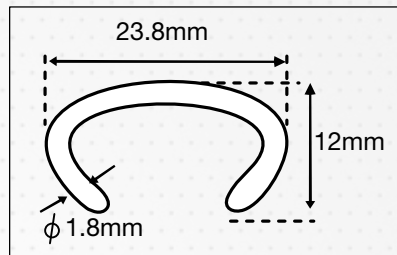


Galvanized Weld Mesh Gabion

The gabion is to be formed from mesh panels such that the front, rear, ends and diaphragm panels are connected to the base panel with Galvanized Steel C-clips at a maximum spacing of 225mm for all joints. Part of this process must be undertaken in a factory-controlled environment. The lid may be supplied loose or fixed in the same manner to the rear or face panel.

Diaphragm (partitioning panels) spacings should not exceed 500mm on units oriented as stretchers or as headers.

Should units be required to be pre-filled and lifted as opposed to filling in situ, additional clips, rings and mesh panels may be required. In such circumstances the manufacturer must be consulted prior to supply to ensure product is suitable for application.

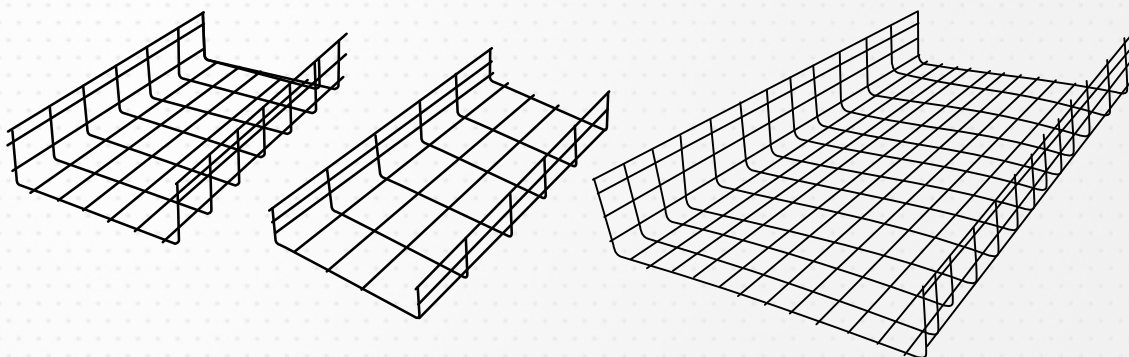


It should be noted that it is industry standard for gabions to be quoted as overall nominal sizes. The actual gabion sizing is dependent upon the physical mesh configuration. Clarification should always be sought from the manufacturer in relation to gabion sizing. Designation of sizes length x width x height.

Galvanized Weld Mesh Gabion



Galvanized Weld Mesh Fence Panels



- ✓ Hard Drawn Wire
- ✓ Galvanized wire up to 5mm
- ✓ Maximum Sheet for mesh type A: Width 1.2mt
- ✓ Maximum Sheet for mesh type B: Width 2.4mt

Mesh Types	Wire Diameter		Wire Pitch		Sheet length
	Longitudinal	Transverse	Longitudinal	Transverse	
A	2.5mm-4mm	2.5mm-4.0mm	50 - 100mm	12mm-100mm	As required
B	4mm-12mm	4mm-12mm	100mm	30mm-100mm	As required

Galvanized Weld Mesh Animal Cages

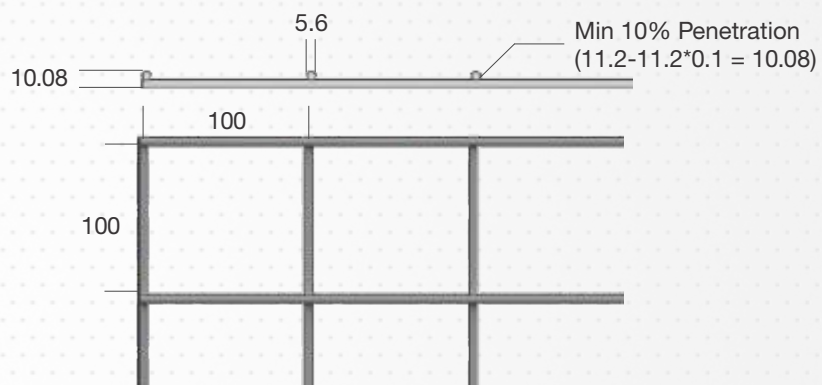


- ✓ Galvanized wire up to 5mm
- ✓ Maximum Sheet for mesh type: Width 1.2mt

Mesh Types	Wire Diameter		Wire Pitch		Sheets
	Longitudinal	Transverse	Longitudinal	Transverse	
C	1.6mm - 2.5mm	1.6mm- 2.5mm	50 - 100mm	12mm-100mm	As required

Mining Mesh

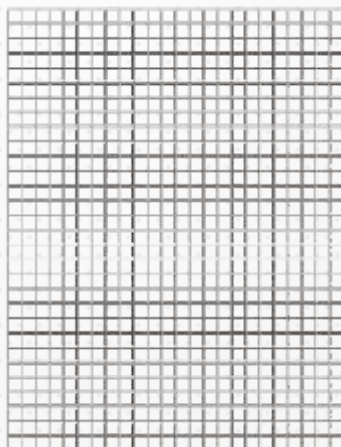
Galvanized Weld Mesh



Advantages

- Easy installation
- No sagging
- Reduced risk of rock fall

2 400



3 000

Sheet Width m	Sheet Length m	Wire Diameters mm	Apertures mm	Coating
1.5	2.4	4.00 5.60	100x100 100x75 100x50	Galv & HDW
2.4	6.0			HDW
1.2	3.0			Galv
1.3	1.3			
1.3	2.5			
1.4	2.4			
1.5	3.4			
2.4	2.6			
2.4	3.0			
2.4	3.5			
2.4	4.0			
2.4	4.5			
2.4	5.0			

Mining Mesh is used for underground tunnel support. It is installed using rock bolts during underground mining excavations to provide additional tunnel stability from loose rocks. Customized mesh can be manufactured in different sheet sizes, Wire Diameters, and apertures in both black and galvanized wires

Notes:

This image shows a full page of a notebook or ledger. It features horizontal ruling lines spaced evenly down the page. A light gray dot grid pattern is visible across the entire surface, providing a guide for writing or drawing. The paper is otherwise blank, with no text or markings other than the printed lines and dots.

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Location Map