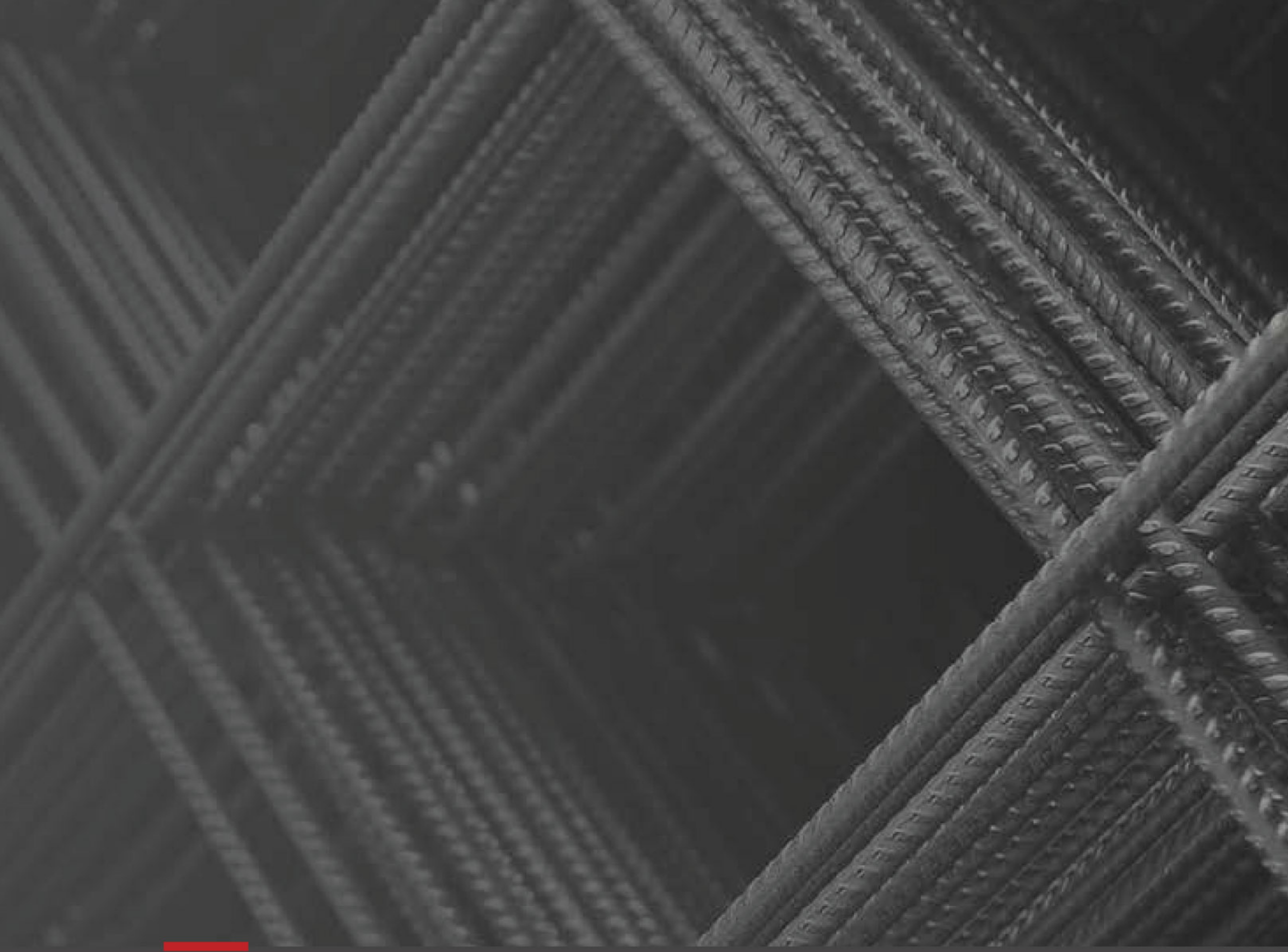
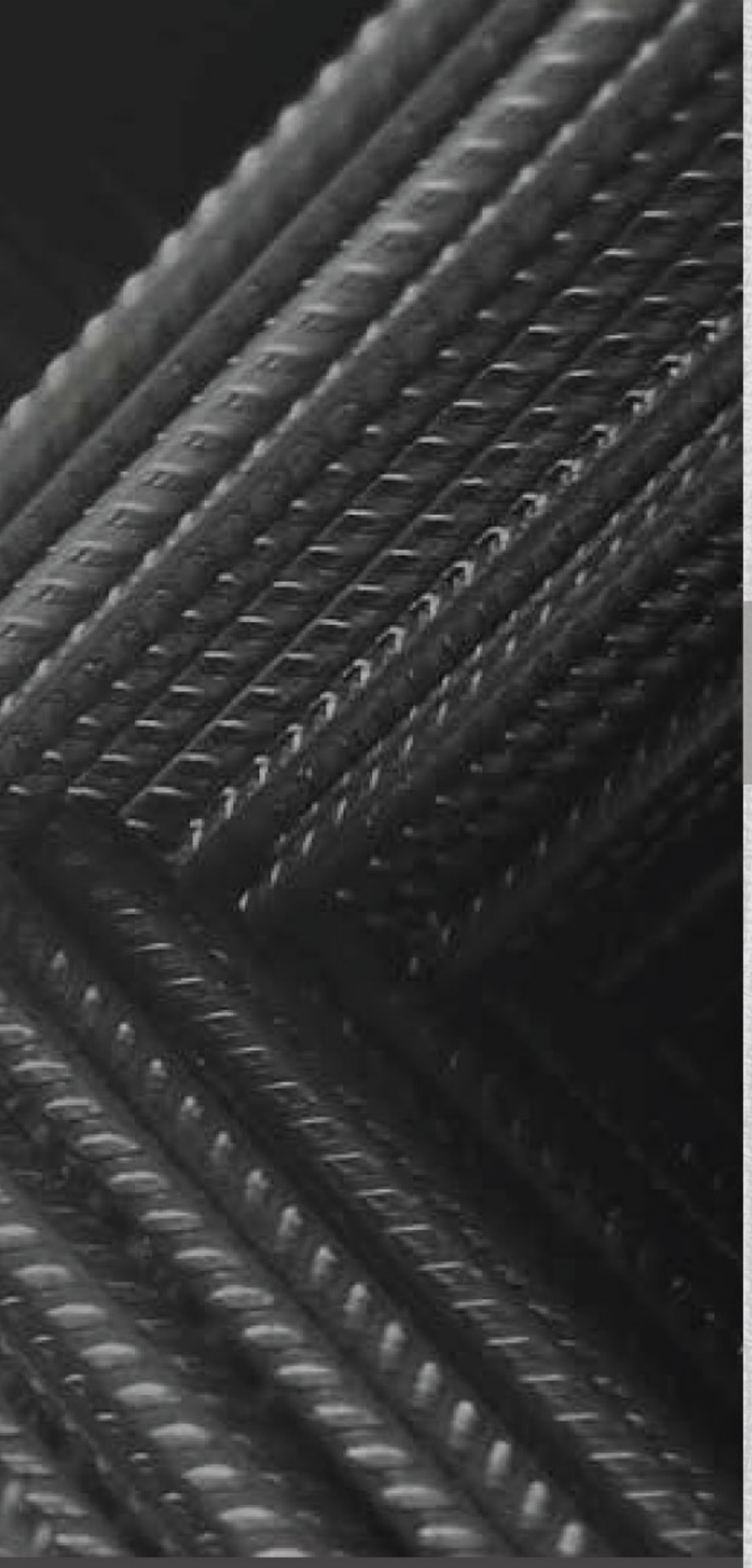
CCNC
STEEL WIRE INDUSTRIES



REIFORCING MESH



CONTENTS

ABOUT **CCNC**

BUILDING
TRUST & POSSIBILITIES

Vision

To be the most trusted and leading steel company that creates and provides the most up-to-date technological steel products that exceed your every needs.

Mission

We produce and supply the best quality steel products with exceptional customer service to our customers that meet their needs in various constructions, which contributes to the sustainable and long-term development of the country.

Core Values: SPIRIT

Satisfaction: Our customers' satisfaction with both our products and our service is our goal. We aim to bring products that meet your needs, if not surpass, and service is fast and smooth.

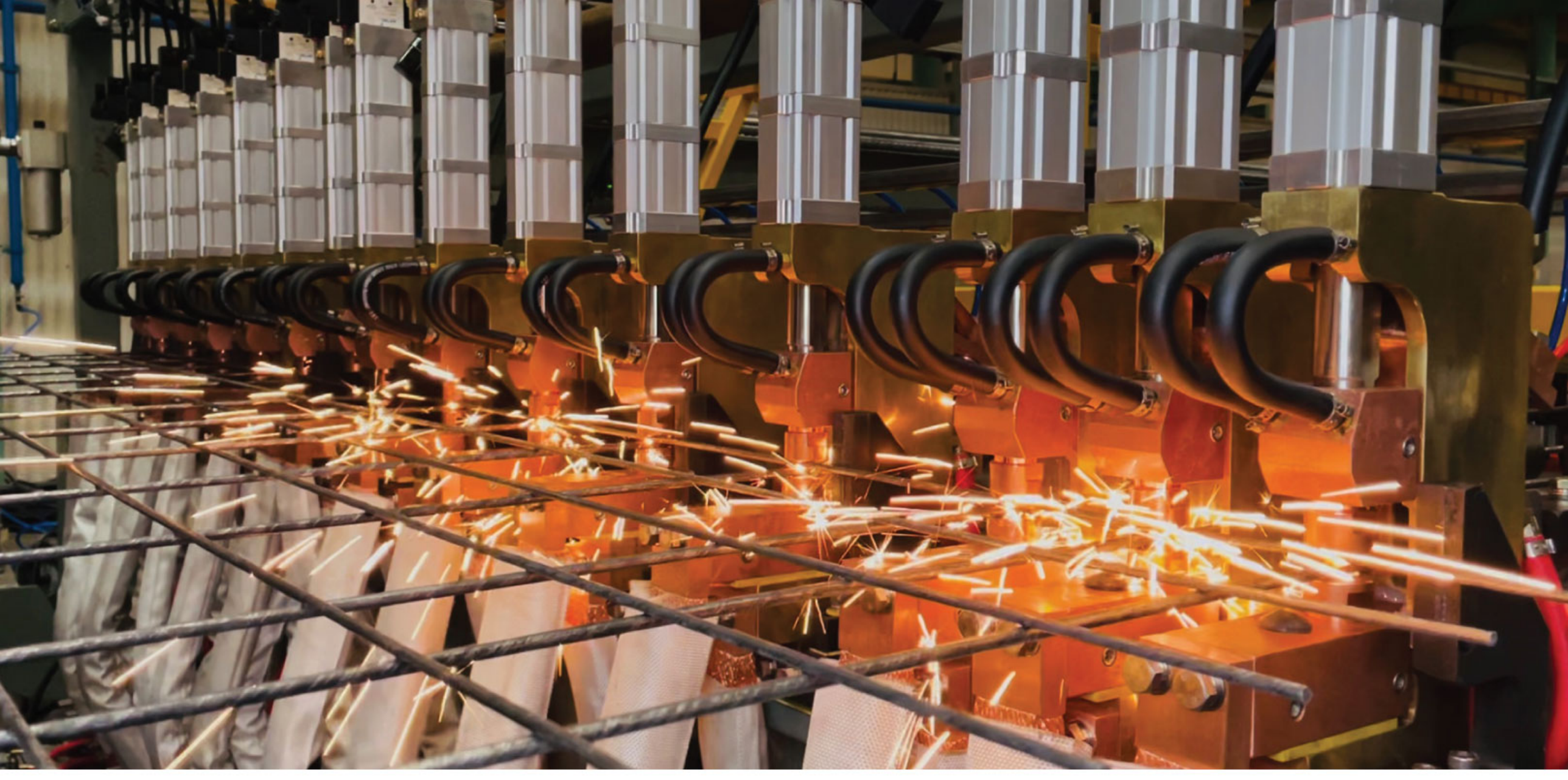
Professionalism: Our team across all departments is committed to go an extra mile to deliver our customers with the best service possible.

Integrity: We hold great pride in gaining our customers' trust in our products as we sell to you what is best, and being honest is what we do.

Reliability: Not only are our products of good quality, but our service promised to be provided is reliable as our team is committed to fulfill the responsibility to our customers.

Innovation: We aspire to create innovative products that ensure the best quality for your construction while keeping it cost-effective.

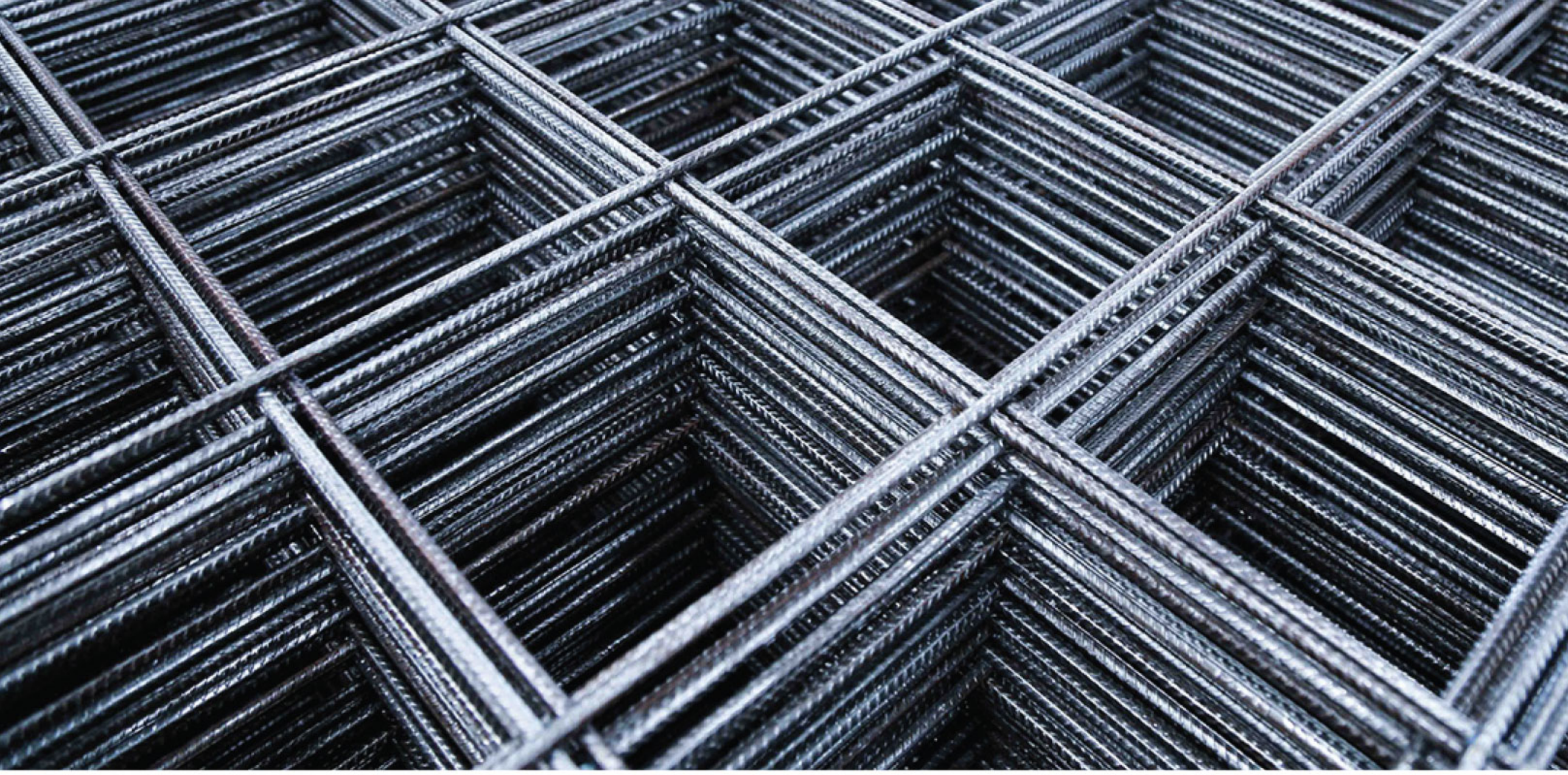
Teamwork: Our team works together as one from management to operation with respect and loyalty.



OUR PROCESS

Discovery
Planning

Concepts
Design



Feedback
Refinement

Production
Delivery

REINFORCING MESH

Using wire mesh helps you to save both labor and time which reduces cost and allows smooth operations. When installed, they are easily move and laid. They are produced by using the latest technology that ensures great tensile strength, yield strength and great resistance to corrosion. They are firm with high stability that allows them to maintain their shapes when concreate is applied. Due to the production quality, they have long service life. Our wire mesh is available in all sizes and can be customized to meet customers' needs. Distribution is available nationwide.

STANDARDS

Standards	Yield strength (N/mm^2)(MPa)	Weld shear load (N)
SS 18:1999 Cold-reduced steel wire for the reinforcement of concrete and the manufacture of welded fabric	500	NA
SS 32:1999 Steel fabric for the reinforcement of concrete	500	250 x area of the larger wire (for plain wires) 150 x area of the larger wire (for ribbed wires)
BS 4482:1985 Cold-reduced steel wire for the reinforcement of concrete	460	NA
BS 4483:1998 Steel fabric for the reinforcement of concrete	460	115 x area of the smaller wires
AS/NZS 4671:2001 Steel reinforcing materials	500	250 x area of the larger wires

BENEFIT
OF REINFORCING MESH

- Save time
- Save labor cost
- Reduce material wastage
- Easy to store and load
- Reduce customer's emotional tension
- Save storage space
- High quality
- Availability of size variations for customer's design

Chemical composition

The weldability of our welded mesh is guaranteed by the chemical analysis of the heats and the equivalent carbon content.

max. C %	max. P %	max. S%	max. Cu %	max. N%	max. Ceq
0,22	0,050	0,050	0,80	0,012	0,50

Standard Metric Fabric

	Wire Spaceing (mm)		Wire Diameter (mm)		Cross-sectional area (mm^2/m)		Nominal mass (Kg/m2)
	Main	Cross	Main	Cross	Main	Cross	
SQUARE FABRIC : SERIES							
A12	200	200	12	12	566	566	8.88
A11	200	200	11	11	475	475	7.46
A10	200	200	10	10	393	393	6.16
A9	200	200	9	9	318	318	4.99
A8	200	200	8	8	252	252	3.95
A7	200	200	7	7	193	193	3.02
A6	200	200	6	6	142	142	2.22
A5	200	200	5	5	98	98	1.54
SQUARE FABRIC : D-SERIES							
D12	100	100	12	12	1131	1131	17.76
D11	100	100	11	11	950	950	14.92
D10	100	100	10	10	785	785	12.32
D9	100	100	9	9	636	636	9.98
D8	100	100	8	8	503	503	7.90
D7	100	100	7	7	385	385	6.04
D6	100	100	6	6	283	283	4.44
D5	100	100	5	5	196	196	3.08
RECTANGULAR FABRIC : B-SERIES							
B12	100	200	12	8	1131	566	10.90
B11	100	200	11	8	950	475	9.43
B10	100	200	10	8	785	393	8.14
B9	100	200	9	8	636	318	6.97
B8	100	200	8	8	503	252	5.93
B7	100	200	7	7	385	193	4.53
B6	100	200	6	7	283	193	3.73
B5	100	200	5	7	196	193	3.05
SQUARE FABRIC : E-SERIES							
E12	150	150	12	12	754	754	11.84
E11	150	150	11	11	633	633	9.95
E10	150	150	10	10	523	523	8.23
E9	150	150	9	9	424	424	6.67
E8	150	150	8	8	335	335	5.27
E7	150	150	7	7	257	257	4.03
E6	150	150	6	6	189	189	2.96
E5	150	150	5	5	131	131	2.06

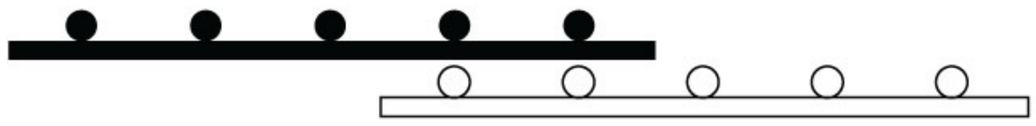
Fabric lap

the lapping of welded steel fabric allows the transmission of forces between one fabric to the next, avoids spalling of the concrete and formation of large cracks.

Types of fabric lap

Full yield strength layered lap

- Commonly used for plain welded mesh
- Staggered arrangement to avoid accumulation of laps

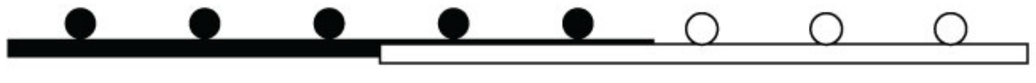


Half yield strength layered lap

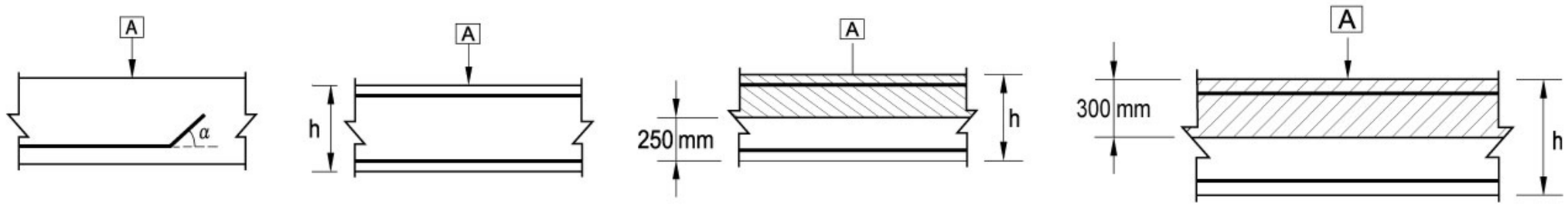
- May be used for side laps across beams

Flying ends lap

- A form of in-plane lapping where one sheet has a lap length overhang without welded intersections



Description of bond conditions



a) 45° ≤ α ≤ 90°

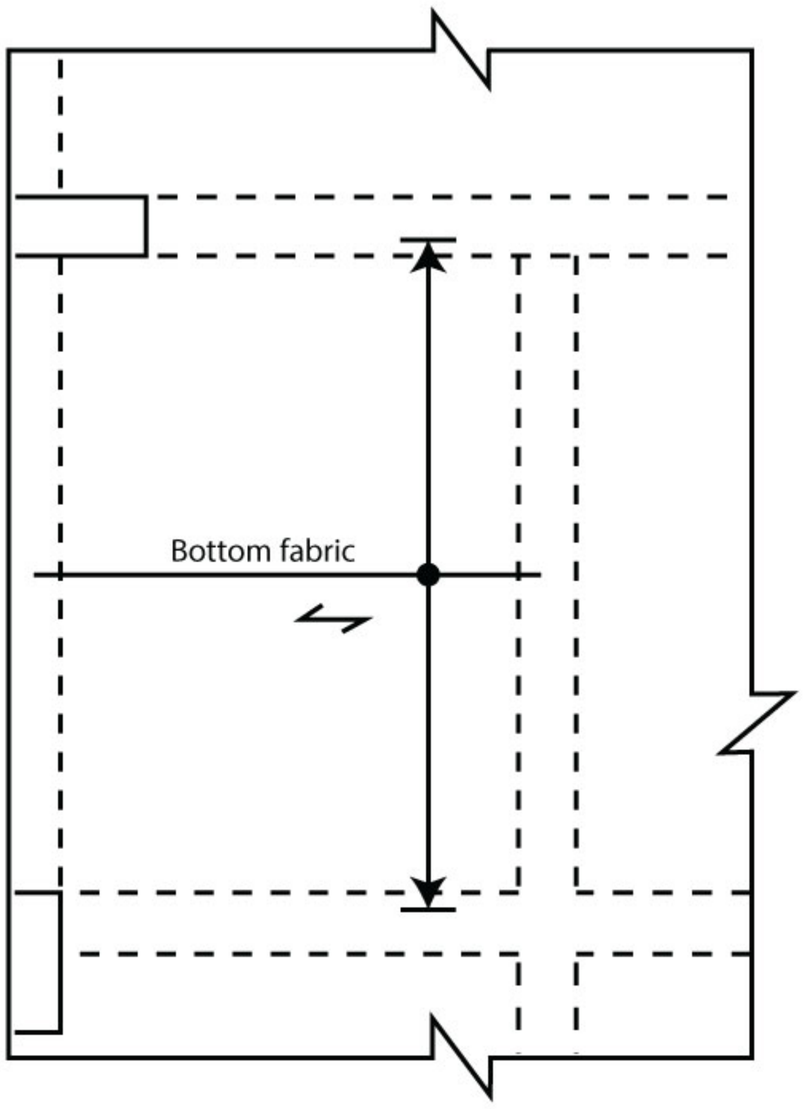
b) h ≤ 250mm

c) h > 250mm

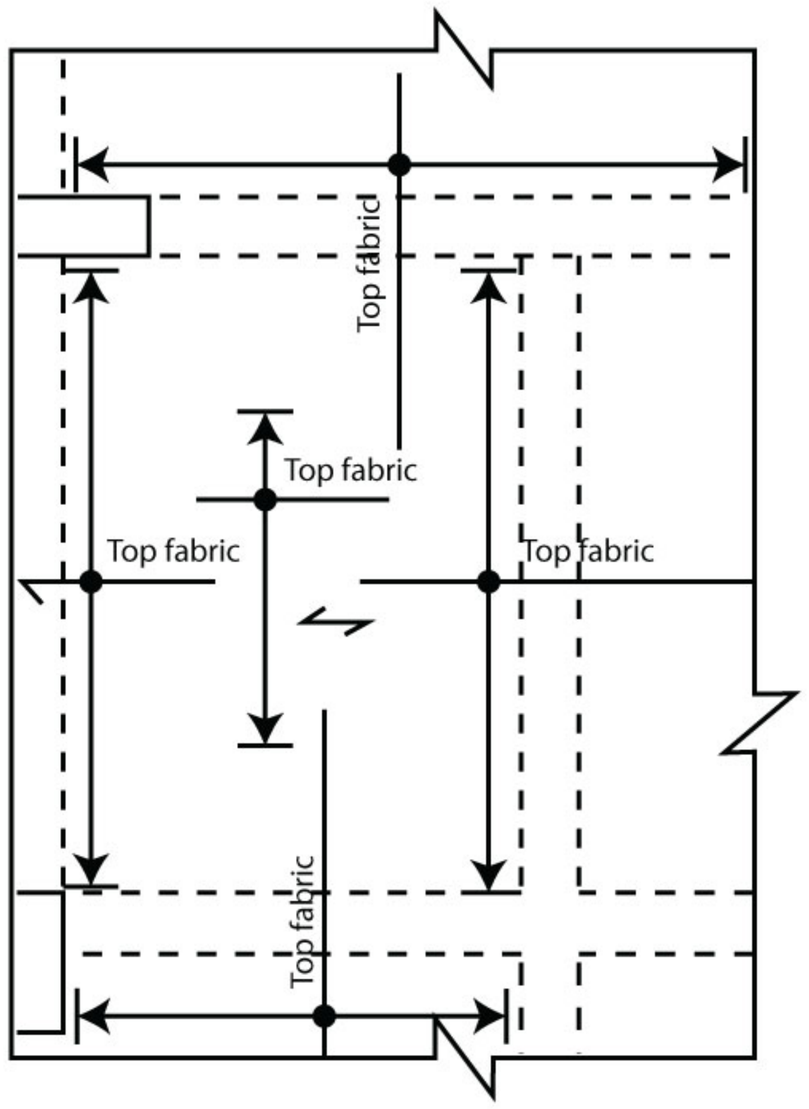
d) h > 600mm

Detailing

Consultants can specify the length of mesh that penetrates into beams

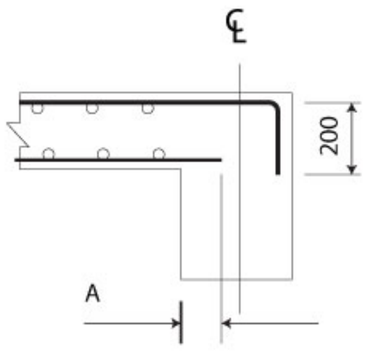
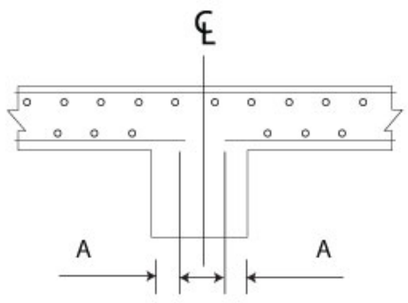
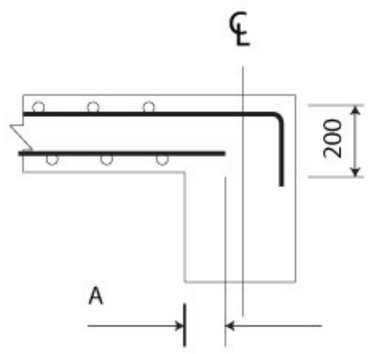
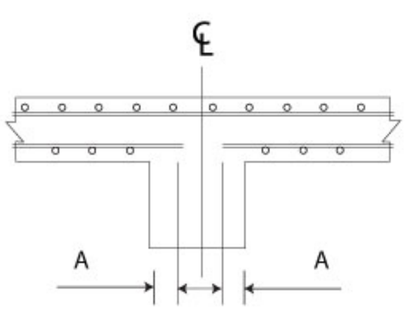


Bottom welded steel fabric in slab

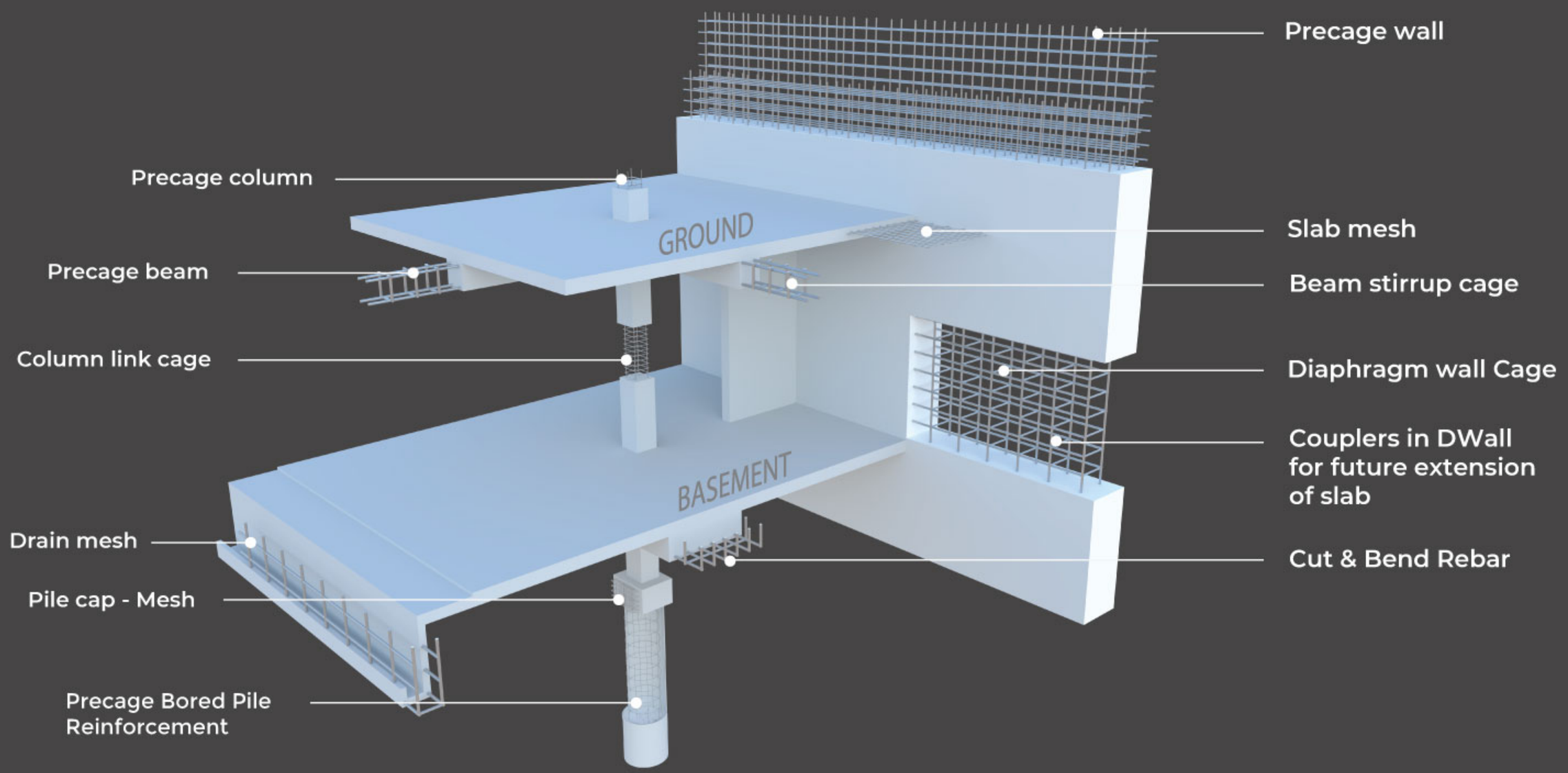


Top welded steel fabric in slab

Standard anchorage details

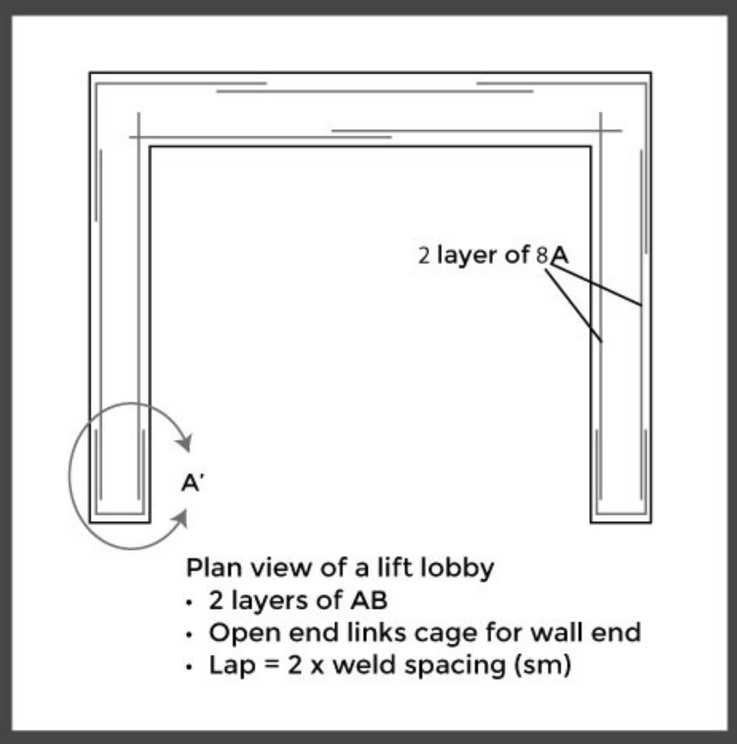
Location	Anchorage detail		Anchorage length (A)	
	At end support	At intermediate support	One-way	Two-way
Main wire			A = 100mm (min.) For wire ø < 10mm A = 150mm (min.) For wire ø ≥ 10mm & for twin wires	A = 100mm (min.) For wire ø < 10mm A = 150mm (min.) For wire ø ≥ 10mm & for twin wires
Cross wire			A = 50mm (min.) For all cross wire diameter unless otherwise stated	A = 100mm (min.) For wire ø < 10mm A = 150mm (min.) For wire ø ≥ 10mm & for twin wires

APPLICATION



Types of reinforcing mesh in a building

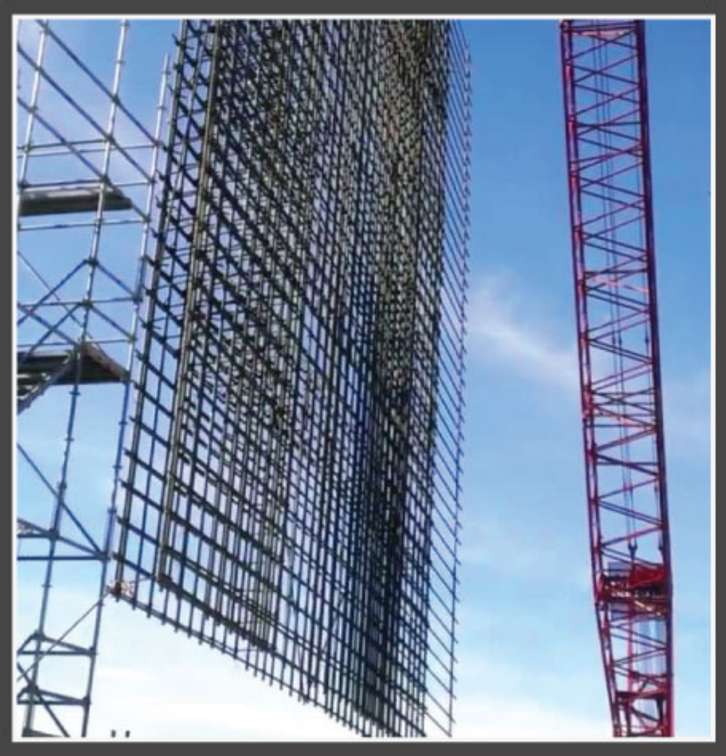
Lift lobby RC Wall



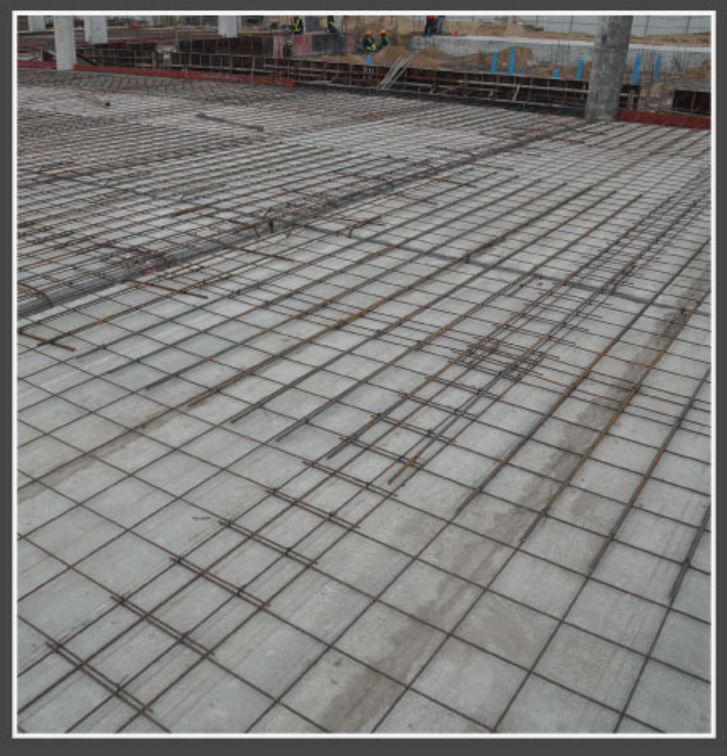
Plan view of a lift lobby
- 2 layers of AB
- Open end links cage for wall end
- Lap = 2 x weld spacing (sm)

Precast Staircse

Wall Mesh

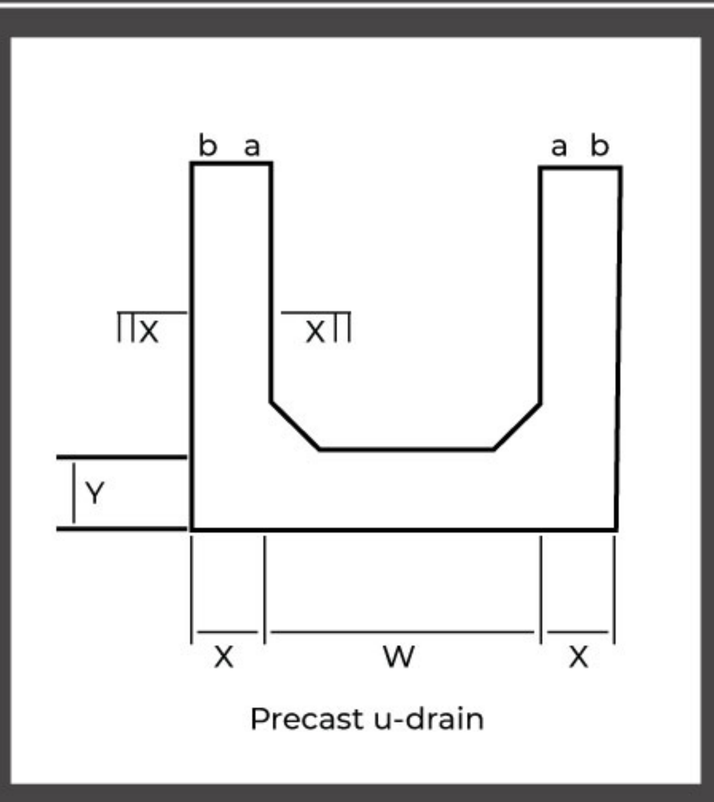


Slab Mesh



Designer Mesh

Drain Mesh



Precast u-drain

OUR MATERIAL

WIRE ROD

Quality wire rod made of low/medium-carbon steel for cold rolling and drawing.

Chemical composition

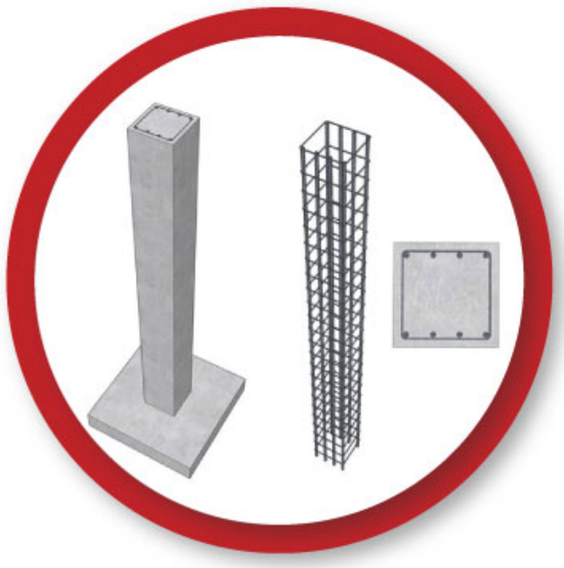
max. C %	max. P %	max. S%	max. Cu %	max. N%	max. Ceq
0,22	0,050	0,050	0,80	0,012	0,50

HARD DRAWN STEEL WIRE

Our wires are produced with high quality materials with the latest manufacturing technology. They have great strength, both tensile and yield strength. Hard drawn wire can be used in various applications. Distribution is available nation-wide.

COLD DRAWN STEEL WIRE

Oure Cold-Drawn Wires are Produced to ensure great application quality. Having Produced by our latest technology, they possess great strengths and high stability. Our wires can be used for variety of purposes. Distribution is available nation-wide.



K MALL VENG SRENG BOULEVARD

SIHANOUK INTERNATIONAL AIRPORT

CHIPMONGBAKTOUK SHOPPING MALL

PROJECT REFERENCE

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TOYOTA FACTORY

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