METAL MESH

PRODUCT SPECIFICATION GLASS LAMINATION METAL DESIGN

1. TARGET

Product specification defines the general features of Breda Metal Mesh lamination in glass. These notes suggest methods of manipulation and implementation only and do not reflect a guarantee specific result. Suggest methods should be tested before actual implementation within the context of the concrete project. Breda Metals shall not be liable for any results and/or consequences regarding the handling, transforming or installing of material by any third part. All product information is correct at the time of printing but may be subject to change without notice. For the latest information visit bredametals.com

2. DOCUMENT REFERENCE

ISO 9001:2015
Technical sheet updated on website
Test report by RCN issued on 09.03.2021

3. MESH FOR GLASS LAMINATION

Metal Mesh by Breda Metals recommended for glass lamination:

- *Aura SS* • *Aura Oro* • *Spago* • *Fodera Bronzo* • *Fodera Oro* • *Fodera SS* • *Moda BS* • *Moda SS*
- *Nile SS* • *Nile Oro* • *Nile Bronzo* • *Maglia SS* • *Maglia Oro* • *Maglia Bronzo* • *Fiammante Oro*
- *Fiammante Bronzo* • *Fiammate SS* • *Fiammante SS* • *Fiume SS* • *Fiume Bronzo* • *Fiume Oro* • *Fuoco*
- *Brillante Bronzo* • *Trama SS (wrinkled)* • *Tela Oro* • *Catena Brass Copper* • *Catena Brass SS* • *Stella Oro*

4. GLASS LAMINATION DEVICE

For success of glass lamination Breda Metals recommends:

- Laminating line by R.C.N. Solutions srl
- Glass panel FLOAT or EXTRA WHITE 5 mm
- Eva Interlayer REVA BF 0,76 mm;
- High temperature tapes
- Damp heat cyclic condenser
- Oven with forced temperature to test high temperature
- Mesh test sample dim. 100x100 mm

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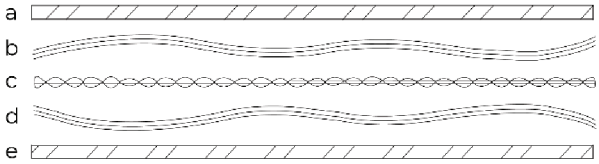
5. GLASS ASSEMBLY

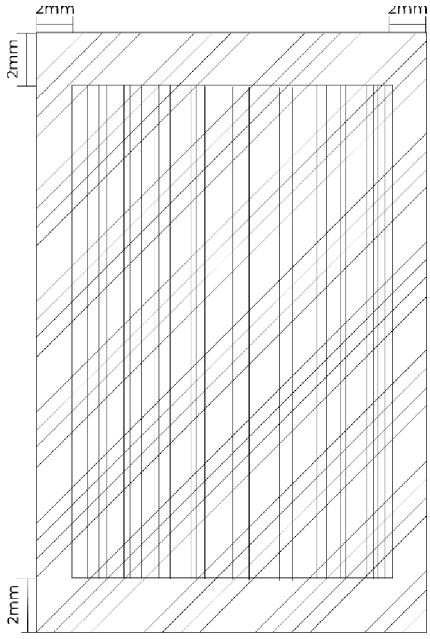
Glass panel thickness varies depending on dimension of the panel to be created.



a. Top glass panel FLOAT or EXTRA WHITE 5 mm
b. EVA film 0.76 mm or similar
c. Metal Mesh by Breda Metals
d. EVA film 0.76 mm or similar
e. Bottom glass panel FLOAT or EXTRA WHITE 5 mm or similar

6. GLASS ASSEMBLY

Glass panel thickness varies depending on dimension of the panel to be created.



Indicative measures between 2 and 5 mm.

7. FEATURED OF MESH

Breda Metals supplies metal mesh for lamination featured as:
a) On roll, panel cut done by customer
b) On panel from stock

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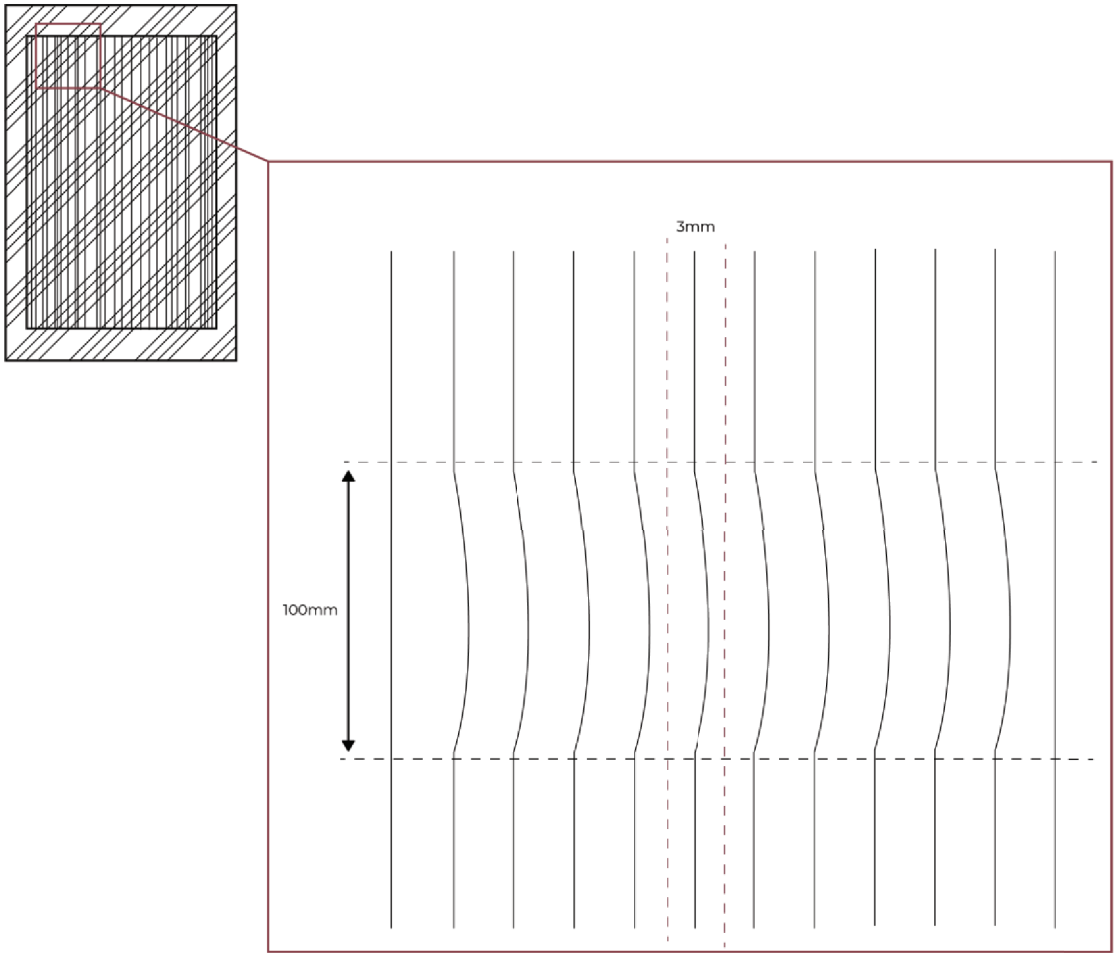
8. TOLERANCE OF WAVE

Breda Metals grants perpendicular metal mesh even if supplied in roll or panel.
It is important that vertical lines of the warp remain as straight as possible/on grain.



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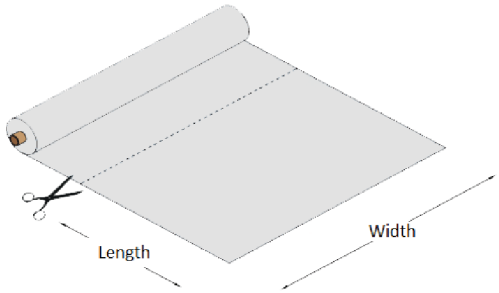
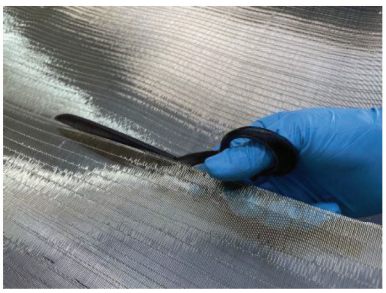
9. TO CUT PANEL

Metal Mesh is cut away always on the edge of the length to take out the selvedge
Normally cut is on the length, on the wide only by specific request. Tailored shape has to be agreed.

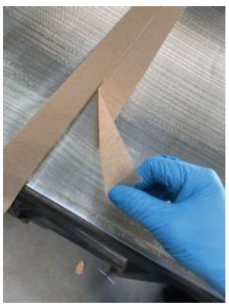


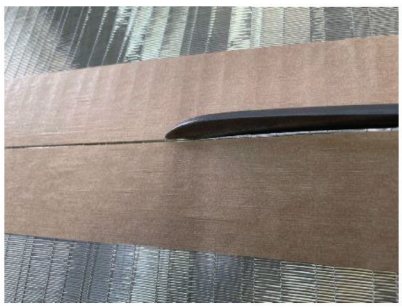
To cut and/or shaping mesh use tailor scissors (e.g. ABC by 10").
Collection Soffici, Eleganti, Lineari, Cangianti.

Cut along the warp, parallel to warp strands.



To cut along the weft is preferred to place guides with paper tape to hold the wire.





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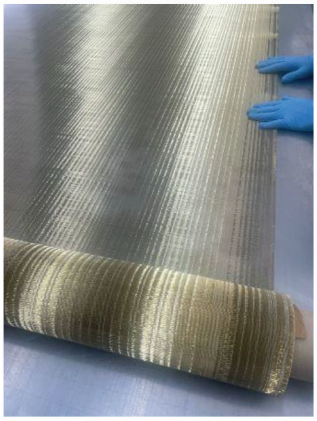
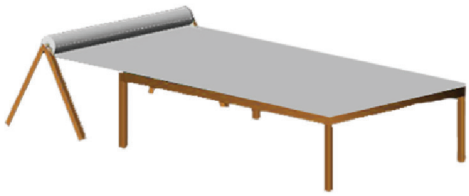
10. MANIPULATION

Do not only use a hand to handle or push the mesh, better twice to counterbalance the force.



Handle mesh by nitrile gloves one-use (ref. UNI EN 420)
Remove auras due to wrong handle by soft microfiber cloth.
Remove paper and/or metal debris by brush or air compressed blow on a distance of 30 cm or silicon roller.

To develop roll use an unwinder stand close to control table.
Avoid surface low of mesh between stand and table.



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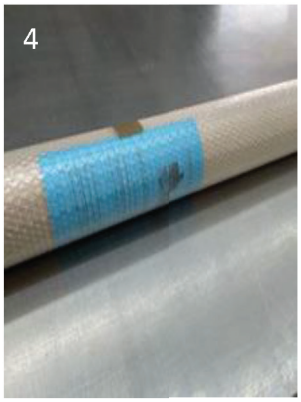
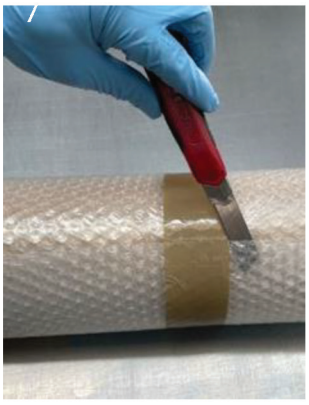
11. PACKAGING

Standard packaging has done by protective material
Be careful to unpack material as picture shows.
Short instruction inside to handle material once unpack.





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12. UNDERSTAND THE MATERIAL

Below is a brief introduction to the composition of the product.

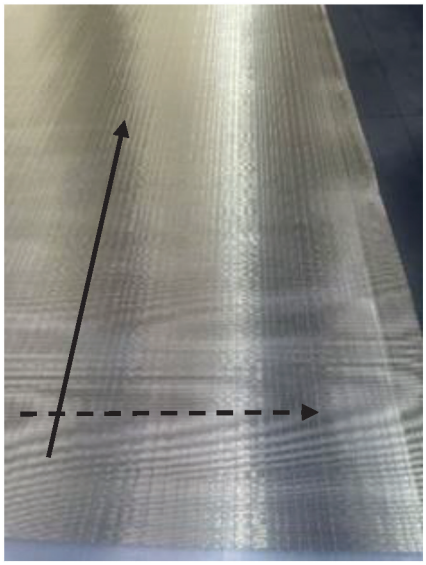
Raw material
Supply chain of raw material is planned to supplier certified by UNI EN ISO 9001.
Production process of raw material (wire) is manged on respect of drawing's reference standard, tolerance included.
Below the connection from mesh and material specification:

Feature	Output	Is it verifiable?	Where
Dimensional	Diameter	Yes	On drawing
Mechanical	Elongation and wire tensile strength	Yes	From the heat to draw
Chemical	Colour, veneer	No	Heat is supplied from steel mill

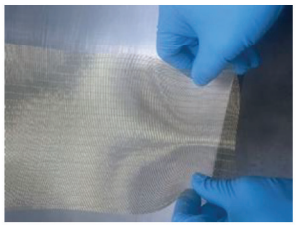
Reference
- Item code: it is an alphanumeric code and identify the product.
- Item description: it is the name in which is identified the mesh on price list and communication.
- Width: how mesh is wide. It is the rated one, not how is produced.
- Warp: it is the lengthwise of the mesh. 100 mt is the maximum length.
- Weft: it is the cross of the mesh. It is bound to dimension of machinery.
- Selvedge: it is the edge of the mesh. It is out from final product.
- Raw material: it described as generic. Chemical analysis, mechanical characteristic e DIN/EN/Werkstoff reference are available on request.
- Linear meter: it is the unit of measure of roll.
- Weight: it is compare to square meter. Value has a delta of 5%.

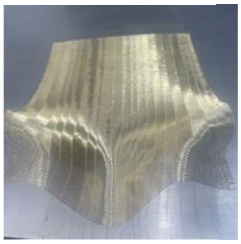
Detailed:

Axis	Direction	Material	Dimension
→	Warp	Stainless steel or syntetic, depends on the model	From 300 to 4.000 mm depends on the model; standard is 1.500 mm
- - →	Weft	Stainless steel or syntetic, depends on the model	Up to 100 mt depends on the model; standard is 25 mt

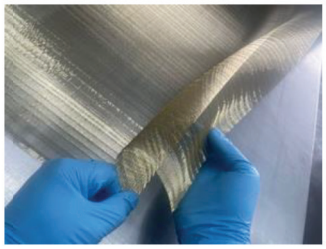


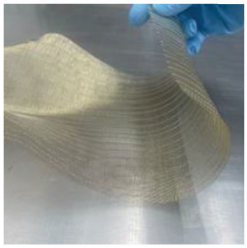
Weft is rigid. Please mind about shape memory due to material metallic nature





Warp is flexible than weft (malleable and rolled) although still the risk to shape memory.





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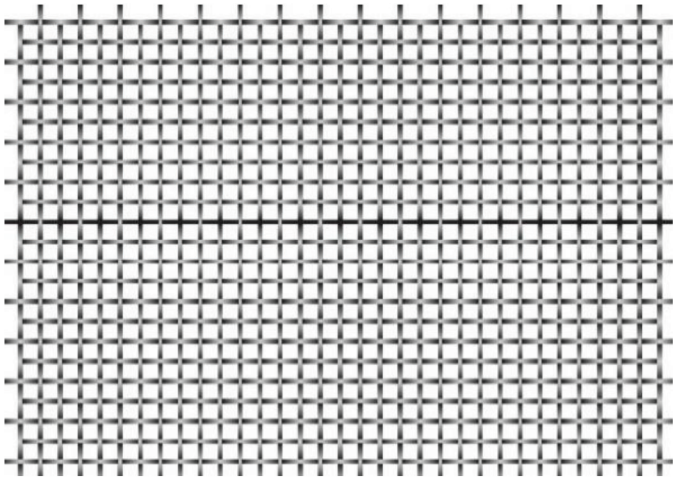
13. MESH FEATURES

Every mesh has its specification as design, weight, kind of cross, raw material. Below listed the main criticality and managing.

Metal grain:

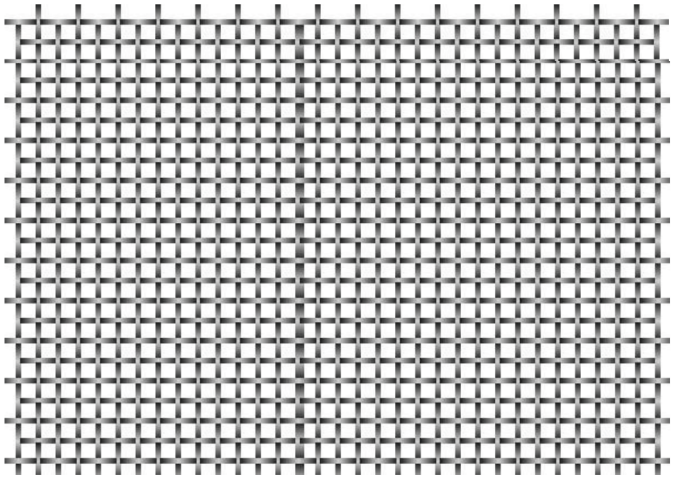
It is natural feature of wire; it is due to hoven process.

It could be recognised as imperfection if it is replicated every 3.3 meter on the wide of mesh.
In case of panels the portion is cut away.



Warp roughness:

Metal mesh could have a section with a lengthwise rough.
It could be recognised as imperfection if it is replicated every 3.3 meter more than 30 cm on the length of mesh
In case of panels the portion is cut away.



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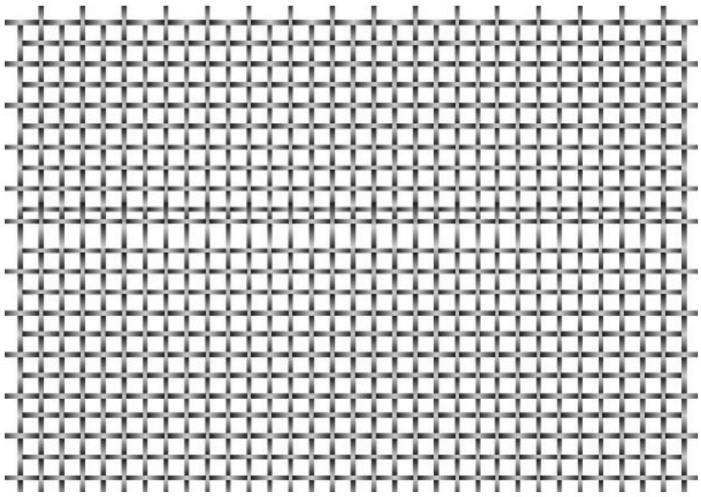
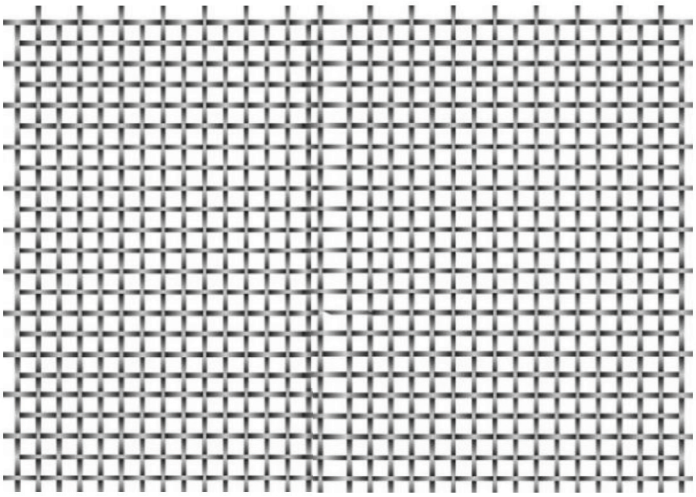
Irregular mesh:

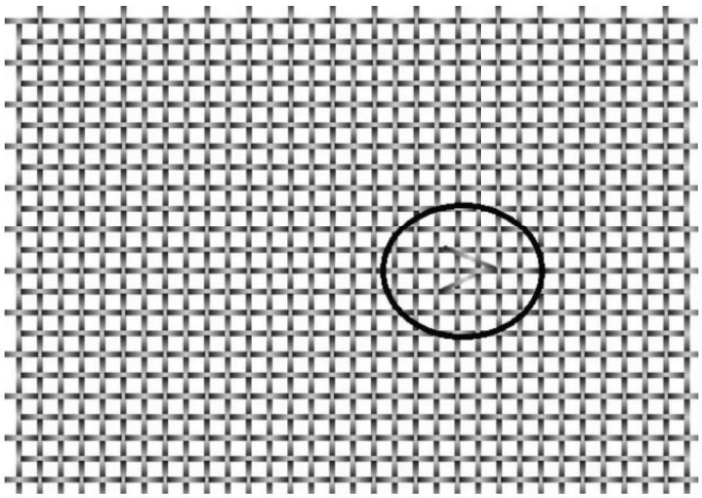
Could be on warp and weft due to break of wire during the waving process.
It could be recognised as imperfection if it is replicated every 3.3 meter on the wide of mesh, on the length every 30 cm
In case of panels the portion is cut away.

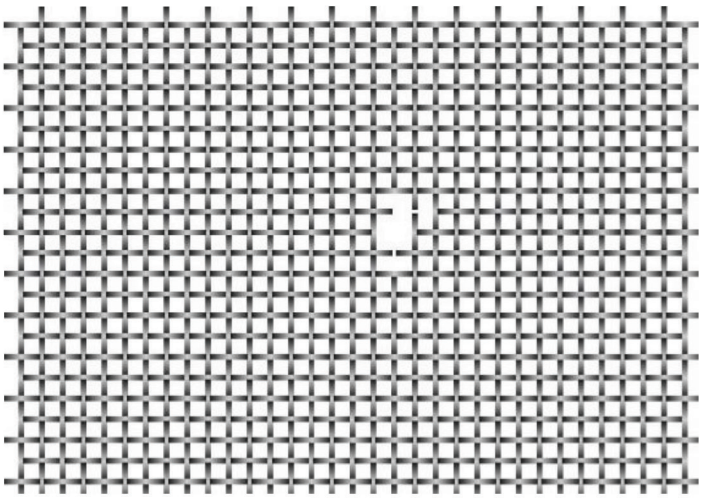




Hole and knot:

Outstanding situation.
It could be recognised as imperfection if it is replicated every 30 cm into 3.3 meter on the length of mesh.
In case of panels the portion is cut away.





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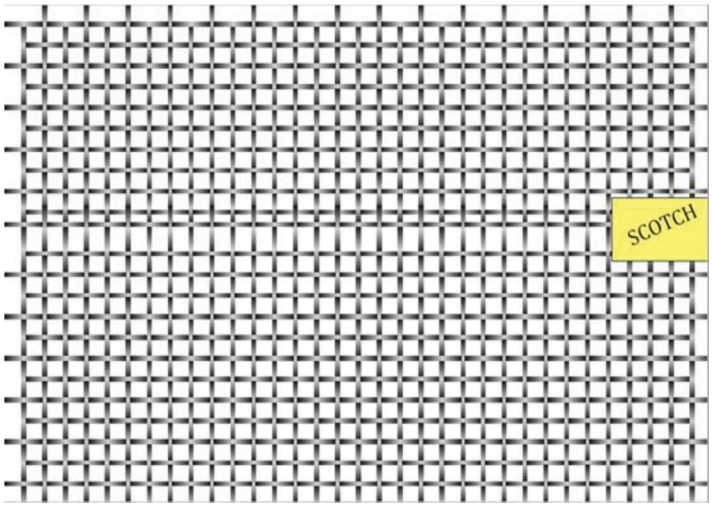
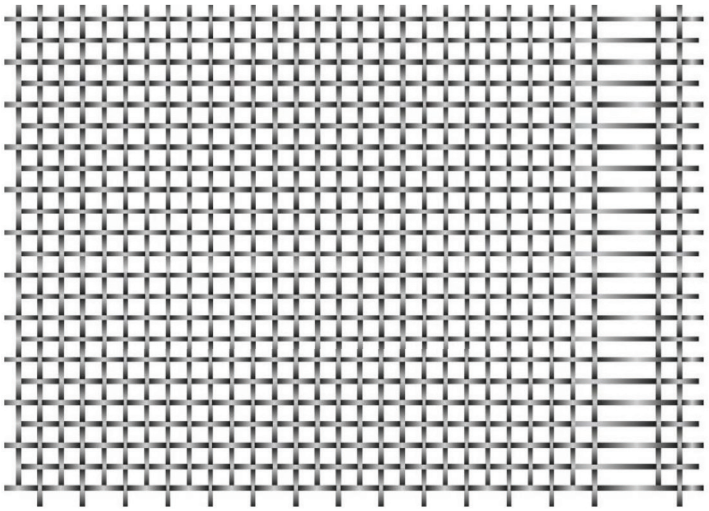
14. MESH SUPPLIED IN ROLL

If mesh has supplied in roll, the mark of imperfection has done on its edge by adhesive tape.



Mesh in roll supplied with selvedge that has cut by user. Calculation of sold quantity is out of selvedge.
E.g. : mesh is sold on width 1500 mm and supplied with selvedge on width 1550 mm. Amount by quantity is calculated on width 1500 mm



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