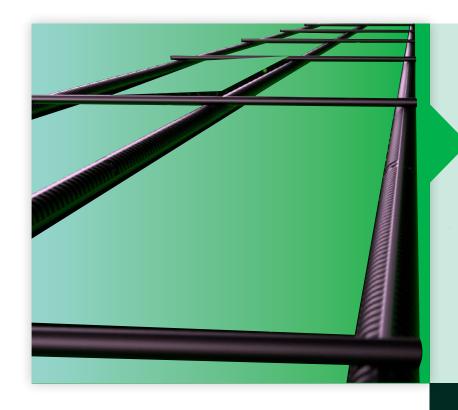


# SENSE 600° TrenchMesh<sup>™</sup> Product Guide







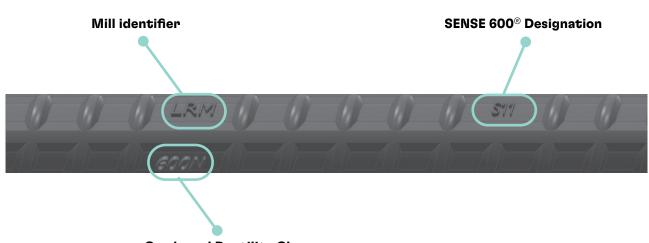


SENSE 600<sup>®</sup>
TrenchMesh<sup>™</sup>



We make it easy to identify

### SENSE 600° Bar identifiers





# SENSE 600° TrenchMesh™ is a new range of trench mesh with improved sustainability credentials

SENSE 600<sup>®</sup> TrenchMesh<sup>™</sup> is trench mesh developed using InfraBuild's innovative reinforcing bar product, SENSE 600<sup>®</sup>, which delivers a lower carbon footprint solution for customers.

SENSE  $600^{\circ}$  TrenchMesh<sup> $\circ$ </sup> is Class N Ductility (Normal Ductility) providing improved footing performance.

We've made it easy, SENSE 600<sup>®</sup> TrenchMesh<sup>™</sup> is CodeMark certified, to comply with the National Construction Code (NCC) giving you the assurance that it conforms to AS/NZS 4671 and can be used as a direct substitute for the common deemed-to-comply designs in AS 2870.



### SENSE 600° TrenchMesh™ can be a direct substitute for Grade 500

✓ Supported by CodeMark certification



#### Up to 16.7% less raw material\*

✓ Easier to handle



#### Lower embodied carbon construction solution\*

✓ Up to 44% reduction in embodied carbon

\*Than our standard Grade 500 reinforcing

# SENSE 600° TrenchMesh™ offers a high degree of material circularity:

SENSE 600® is manufactured in Australia by InfraBuild from scrap steel. SENSE 600® TrenchMesh™ utilises the higher strength steel, innovative bar design and scrap steel to deliver improved sustainability credentials. In-turn a high recycled content means a high degree of material circularity.

- It can deliver a lower embodied carbon solution of up to 44 % less than our standard-grade trench mesh.
- Uses up to 16.7 % less raw materials when compared to our Grade 500 MPa trench mesh, allowing you to positively impact on sustainability of construction.

# **SENSE 600° TrenchMesh**™ meets your compliance needs:



- CodeMark certified for specific applications for ease of substitution
- GECA Certified, in line with our sustainability focus and credentials

### SENSE 600° TrenchMesh™ A choice that makes sense:

InfraBuild is committed to its role in supporting Australia's shift to a lower carbon emission economy. The development of innovative new products and solutions that improve building design, construction efficiency and lower embodied carbon outcomes are our focus.

SENSE 600® TrenchMesh™ offers enhanced sustainability credentials without compromising on performance.

SENSE  $600^{\scriptsize @}$  TrenchMesh  $^{\tiny \text{M}}$  has been manufactured to be easily identifiable:

- SENSE 600® has a unique bar profile distinguished by four longitudinal ribs and a square core.
- SENSE 600® has rolled-in mill marks indicating Grade 600, Ductility Class, Mill and Bar Section Identifiers.

# SENSE 600<sup>®</sup> TrenchMesh<sup>™</sup> Design of Footings

### Keeps design easy:

Design of SENSE 600® TrenchMesh™ in footings for residential applications is as easy as it is for standard 500 MPa reinforcing.

The CodeMark certified SENSE 600® Design Guide for Residential Footings provides designs which are deemed-to-comply with the NCC just as AS 2870, Section 3 does for 500 MPa reinforcing.

For designs which are not covered by the SENSE  $600^{\circ}$  Design Guide for Residential Footings, the footings should be designed to AS 2870 and AS 3600, just the same as footings not covered by the deemed-to-comply provision in AS 2870 Section 3.

SENSE 600® TrenchMesh™ in a footing will provide the same moment capacity as one that is reinforced with the equivalent 500 MPa trench mesh. If the governing design criteria for the 500 MPa trench mesh is deflection or crack width, the designer will need to check the minimum area of steel required, just as they would for 500 MPa reinforcing.

Design software used for the 500 MPa design checks should also be able to conduct SENSE 600® checks.

## SENSE 600<sup>®</sup> TrenchMesh<sup>™</sup> Product range

The table below shows the new SENSE 600® TrenchMesh™ product designations and information with the Grade 500 equivalent.

| SENSE $600^{\circ}$ TrenchMesh <sup><math>^{\circ}</math></sup> ( $f_{sy}$ = $600$ MPa) |          |                  |                   |                     | Grade 500 Equivalent |
|---|----------|------------------|-------------------|---------------------|----------------------|
| Designation   | No. Bars | Diameter<br>(mm) | Area<br>(mm²/bar) | Total Area<br>(mm²) | Designation          |
| 3-S10TM   | 3        | 9.8              | 74.9              | 225                 | 3-L11TM              |
| 4-S10TM   | 4        |                  |                   | 300                 | 4-L11TM              |
| 5-S10TM   | 5        |                  |                   | 375                 | 5-L11TM              |
| 6-S10TM   | 6        |                  |                   | 450                 | 6-L11TM              |
| 3-S11TM   | 3        | 11.0             | 94.2              | 283                 | 3-L12TM              |
| 4-S11TM   | 4        |                  |                   | 377                 | 4-L12TM              |
| 5-S11TM   | 5        |                  |                   | 471                 | 5-L12TM              |
| 6-S11TM   | 6        |                  |                   | 565                 | 6-L12TM              |
| 3-S15TM   | 3        | 14.6             | 168               | 503                 | 3N16                 |
| 4-S15TM   | 4        |                  |                   | 670                 | 4N16                 |

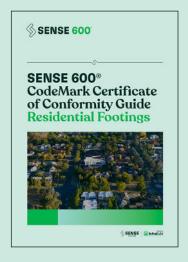
#### Disclaimer:

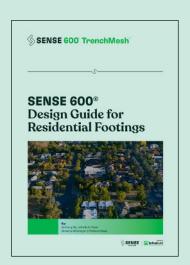
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### It just makes SENSE



