

STEEL PRODUCTS GUIDE

Explanation and principles

The production of steel has a number of environmental impacts, arising from mining, processing, manufacture and transport. It is also energy intensive, even when recycled steel is used as feedstock, and produces significant amounts of greenhouse gas emissions. Consequently, construction steel is high in embodied energy, and can contribute significantly to a building's 'carbon footprint'.

Reducing the amount of structural steel used in homes at Mullum Creek is the best way to reduce the environmental impacts associated with the use of this material. Designing your home and landscape to minimise the structural demand for steel and replacing it with environment friendly timber products is the most effective approach. Minimising the structural demands of your designs not only reduces the need for large amounts of structural steel, but can also reduce the need for steel reinforcement in concrete, which itself accounts for a large part of the embodied energy in concrete structures.

Where the use of steel is difficult to avoid, it should be sourced from a 'responsible steelmaker' who has energy reduction processes in place. Major Australian-based companies meet the 'responsible steelmaker' criteria. And all steel products recommended in this Guide are produced by manufacturers who are members of the World Steel Association (WSA) and the Climate Action Program (CAP).

The following table lists the different steel products from suppliers that manage their environmental impacts responsibly, and are recommended for use throughout the development at Mullum Creek. For your convenience we have tried to locate nearby suppliers of these products.

Disclaimer

While considerable effort has been made to ensure the accuracy of the information provided in the Mullum Creek Steel Products List, neither Mullum Creek nor the author accept liability for any consequences arising from reliance on the information published. If you have doubts about acting on any of the information, please seek independent professional advice.

| | Product | Manufacturer / Brand | Nearby Suppliers | Reasons for Recommendation |
|---|---------------------------------------|--|--|--|
| STEEL REINFORCEMENT FOR CONCRETE AND MASONRY STRUCTURES | Prefabricated Reinforcing Bars | OneSteel Reinforcing Pty Ltd ECO-BAR™ 500PLUS® Prefab® | One Steel Reinforcing 10/505 Maroondah Hwy Ringwood, VIC (03 9879 5360) | 82% produced using energy efficient process. Prefab® generates less waste and scrap on site. |
| | | ARC Pty Ltd Fabrication | ARC Bayswater 10 Sydney Road Bayswater, VIC (131 557) | Manufactured in ISO 9001 accredited facilities. Prefabrication generates less waste and scrap on site. |
| | Reinforcing Bars (Roll-out Carpet) | OneSteel Reinforcing Pty Ltd ECO-BAR™ 500PLUS® BAMTEC® | One Steel Reinforcing 10/505 Maroondah Hwy Ringwood, VIC (03 9879 5360) | 82% produced using energy efficient process. Made to order, it allows for the size of and positioning of reinforcing steel to be optimised with variable bar diameters, spacings and lengths. |
| | | ARC Pty Ltd Rollmax® | ARC Bayswater 10 Sydney Road Bayswater, VIC (131 557) | Manufactured in ISO 9001 accredited facilities. Made to order, it allows for the size of and positioning of reinforcing steel to be optimised with variable bar diameters, spacings and lengths. |
| | Customised Reinforcing Mesh | OneSteel Reinforcing Pty Ltd ECO-MESH™ ONEMESH® | One Steel Reinforcing 10/505 Maroondah Hwy Ringwood, VIC (03 9879 5360) | Reinforcing bar carpet allows for very efficient use of steel as it can be fabricated to order with variable bar spacings and diameters. 66% produced using energy efficient process. Made to order, it allows for the size of and positioning of reinforcing steel to be optimised with variable bar diameters, spacings and lengths. |
| | | ARC Pty Ltd SpecialMesh® | ARC Bayswater 10 Sydney Road Bayswater, VIC (131 557) | Reinforcing bar carpet allows for very efficient use of steel as it can be fabricated to order with variable bar spacings and diameters. Made to order, it allows for the size and positioning of reinforcing steel to be optimised with variable bar diameters, spacings and lengths. |
| STRUCTURAL STEEL | Hot Rolled Structural Steel | OneSteel Pty Ltd 300PLUS® bars and section | OneSteel Metalcentre Scoresby 1257 Ferntree Gully Road Scoresby, VIC (03 9212 7837) | Manufactured in ISO 9001and 14001 accredited facilities. 300 MPa Strength grade. |
| | | Bluescope Steel Pty Ltd HA200 to HA350 Steel Brightform® Steel | BlueScope Distribution Geelong 2-30 Point Henry Road Moolap, VIC (03 5240 0320) | Manufactured in ISO 9001 accredited facility. |
| | | | CMC Coil Steels 32 Howleys Road Notting Hill, VIC (03 9543 8022) | |
| | Cold Formed Structural Steel | OneSteel Pty Ltd Duragal® | OneSteel Metalcentre Scoresby 1257 Ferntree Gully Road Scoresby, VIC (03 9212 7837) | Manufactured in ISO 9001and 14001 accredited facilities. 300 to 450 MPa Strength grade. |
| | | Bluescope Steel Pty Ltd Lysaght® | BlueScope Distribution Geelong 2-30 Point Henry Road Moolap, VIC (03 5240 0320) | Manufactured in ISO 9001 and 14001 accredited facilities. 300 to 450 MPa Strength grade. |
| | | | CMC Coil Steels 32 Howleys Road Notting Hill, VIC (03 9543 8022) | |
| SHEET STEEL | Steel Sheet | Bluescope Steel Pty Ltd This Australian manufacturer provides steel sheet (Zincalume®) of varying thicknesses for many applications (e.g. wall and roof cladding, flashings and cappings, gutters and downpipes) to all major sheet steel product manufacturers. | Reece Templestowe 7 Webster Road Templestowe, VIC (03 9846 4988) | Steel sheet manufactured in ISO 9001 facilities. There are other manufacturers and brands that supply steel cladding and lining in Victoria that are not listed but will provide a similar ESD outcome. |
| | | | Stratco Home Improvement Store 881 Burwood Highway Ferntree Gully, VIC (03 9724 6142) | |
| | | Some major manufacturers around Donvale include: • Lysaght | Stramit Building Products 2/1464 Ferntree Gully Road Knoxfield, VIC (03 9237 6200) | |
| | | Stratco Stramit Fielders | Fielders Victoria 9-13 Jessica Road Campbellfield, VIC (03 9300 7700) | |