EURO ACCESSORIES

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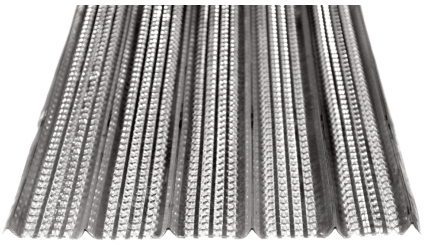
Data Sheet

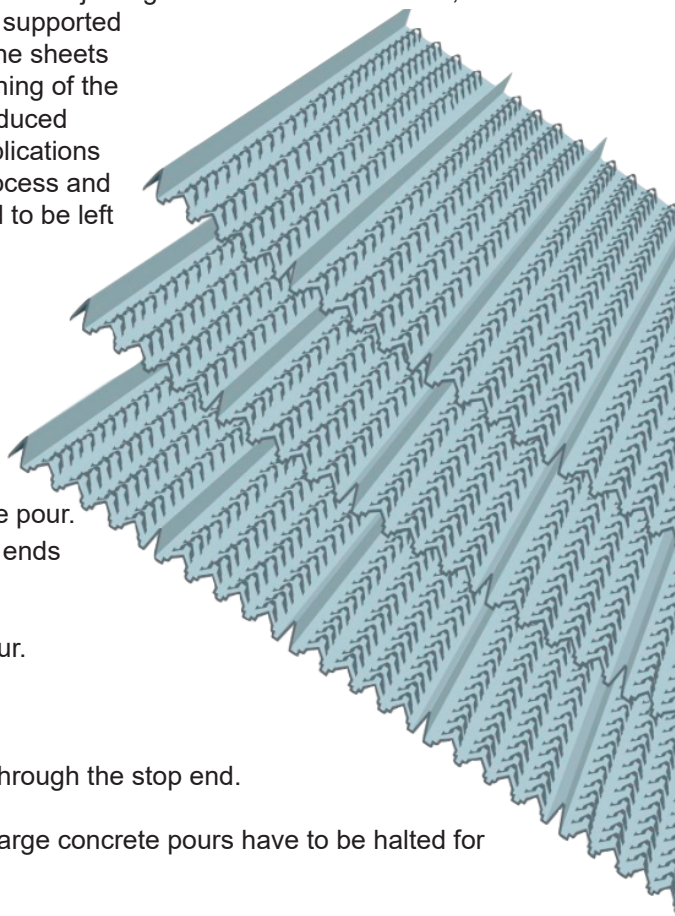
Stop End Rib Sheets

A galvanised expanded metal sheet used as a permanent shuttering for stopends and day joints.

Product Code	Length (mtr)	Width (mm)	Thickness (mm)
EMS2	2	445	0.4
EMS3	3	445	0.4



Stop End Rib Sheets are a lightweight expanded metal type permanent formwork system. The system provides a quick and simple method of providing effective stop ends in slabs and walls, as well as providing an effective means of creating soffits and providing cost effective shuttering systems for inaccessible areas. The perforated nature of the product allows the passage of water and air reducing pour pressures significantly and reducing the potential of honeycombing in the finished concrete. The open pattern of the material gives a clear visual indication of concrete compaction and allows the progress of the concrete pour to be monitored easily. The system is provided in 445mm wide sheets in three material grades and varying lengths up to 5.0 metres in length. The ribbed pattern of the product provides a simple method of joining sheets to increase width, whilst ncreases in length can be achieved with minimal lapping of the sheets at supported joints. The sheets can be fitted prior to or after the steel fixing process. The sheets can be cut with simple hand shears or light duty abrasive wheels. Any joining of the material can be carried out using tying wire and steel fixers snips. The reduced concrete pressures associated with the system means that in vertical applications the centres for restraints can be increased, accelerating the formwork process and reducing associated costs in material and labour. The system is designed to be left in place permanently after the concrete has been poured and the perforated profile leaves a keyed surface requiring no preparation prior to the subsequent concrete pour, other than removing any timber supports and ancillary items used to provide adequate cover to the material (normally in the form of timber battens).



Advantages of Stop End Rib Sheets over Traditional Methods

- Reduces the risks from impacting equipment, commonly used for mechanical preparation of the joint face prior to the subsequent concrete pour.
- Reduces concrete pour pressures when compared to conventional stop ends manufactured from timber or steel, resulting in fewer supports.
- Provides a superior keyed finish over scabbled joint surfaces.
- Decreases the preparation time of the joint face prior to the following pour.
- Lightweight and simple to install.
- Can be fixed prior to or after steel fixing process.
- Colour coding clearly identifies grade of material.
- Provides a means of visually checking the pour progress, with visibility through the stop end.
- Allows the free passage of air to reducing the risk of voids.
- Provides an easily fixed system to provide emergency stop ends when large concrete pours have to be halted for unforeseen reasons.
- Easily fixed without specialist labour.

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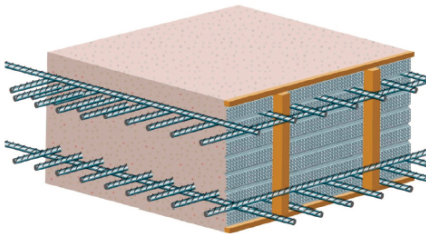
Installation

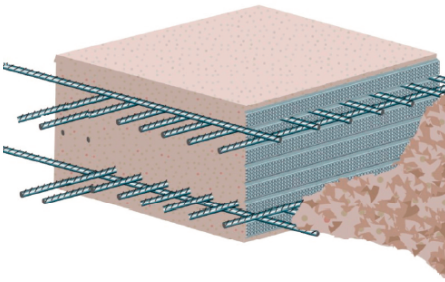
Stop End Rib Sheets can be used in three distinct manners, vertical stop ends, horizontal stop ends and soffit formwork for suspended slabs. Each application requires the system to be supported at varying centres depending on the dimensions of the concrete element. Please see the following tables for each application. In addition the horizontal ribs of the Stop End Rib system should be placed pointing into the pour and perpendicular to the supports being utilised. As an added indicator of the correct placement, the colour coding system should be visible on the face exposed to the second pour (external face of the formwork).

As with the reinforcement steel in the structure, adequate concrete cover to the sheet should be provided around any edges likely to be exposed in the completed structure, this is normally achieved by fixing timber battens around any edges of the product subject to exposure in the finished concrete. These items should be removed prior to the following pour. If any increase in the 445mm width of the material is required then sheets should be joined by nesting the last rib of the sheet with the first rib of the next sheet and then tying them together at minimum 150mm centres. If increases in the length of the material is required then the sheets must be overlapped by a minimum of 50mm and be tied at each rib, the joint should always be supported along its length by one of the formwork supports. Pouring The Concrete.

Stop End Rib Sheets can be used readily with concrete slumps in the range 70mm to 100mm. Slumps in a range above this and up to 180mm can be used but the use of vibrating equipment. To minimise potential damage to the joint face concrete pouring should be carried out at a distance no less than 500mm from the rib sheet product allowing the concrete to flow towards the material at its own rate. If this is not possible every precaution should be taken not to damage the sheets in the process. During the normal process vibrating pokers can be used, but should not be used continuously at a distance less than 450mm from the sheets. This distances can be reduced but the poker should only be used in short bursts of four or five seconds. The Stop End Rib joint face should be monitored during the pour process and full compaction is complete at the joint face when pea sized beads of concrete appear on the exposed surface. Vibration of the concrete in this area should stop at this point. Once the concrete has cured sufficiently timber supports and any battens used to provide cover to the sheets should be removed.

Installation Points at a Glance





Increases in width achieved by nesting first and last rib and then tying at 150mm entres along joint.
Increases in length, sheets are overlapped by 50mm, tied at each rib and placed at support.
75mm overlap for soffits.
Min Slump 70mm - Max Slump 100mm
No continuous vibration equipment to be used less than 450mm away from the sheets.
Only short bursts of vibrating equipment local to Stop End Rib Sheets.
Slumps above 100mm achievable with sparing use of vibrating equipment.
Stop vibration near the Euro Rib when beads of concrete are visible on exposed joint.
Ensure adequate cover is provided to sheets on all edges bordering the cover zone.
Leave sheets in place.

Horizontal Support Centres for Stop Rib in Vertical Stop Ends

Support Reference	Distance between supports
1 (top support) to 2	550
2 to 3	500
3 to 4	450
4 to 5	400
5 to 6	375
6 to 7	325
7 to 8	275
8 to 9	275
then on	275

For walls up to 900mm thick.
First support to be fixed flush with top of wall.
Ribs to be placed vertically facing into concrete pour.
Use one sheet up to 1500mm heigh.
Sheets must be overlapped and joined at a support.