High Rip (Expanded Metal Rib Lath)

High-RIP®, is the stable expanded metal rib for perfect construction joints in reinforced concrete constructions

High-RIP® enables the perfect joint between the concreted sections without needing to further process the construction joint. This enables a high concreting speed and the visual monitoring of the concreting process.

The areas of application in concrete construction:
- As permanent formwork for construction joints
- As permanent formwork for flat, even or shaped components

The areas of application in plastering work:
- For rabitz construction with span widths of up to 1200 mm

High RIP areas of application advantages

Use in concrete construction work
- As permanent formwork for construction joints.
- As permanent formwork for flat, even or shaped components

Advantages in concrete construction work
- The perfect joint between the concreted sections without needing to further process the construction joint.
- Reduction of the concrete pressure during the concreting process.
- Minimisation of empty spaces and cement honeycomb.
- High concreting speed and visual monitoring of the concreting process is possible.

Use in plaster work
For rabitz construction with span widths of up to 1200 mm

Advantages in plaster work
- High stability
- Particularly economic for large span widths

Processing
- Ribs should not be damaged or distorted during fixing.
- The panels must be placed rib on rib, overlapping.

Cutting
- When concreting, the spine of the expanded metal rib work always faces the first concrete section. The open rips on the exposed side guarantee safe bonding with the second section of concrete.
- High-RIP requires the same concrete coverage as reinforcing steel.

- High-RIP® is cut using the metal shears or the circular saw. Avoid deforming the rib.
- Cut the spine of the expanded metal rib work.
- Bend the material.
- Cut off the High-RIP panels
High-RIP®, Setting up a stop end for construction joints

Processing
• High-RIP® (1) is nailed to a corner or shaped bracing (2). Ribs should not be damaged or distorted during fixing. The closed expanded metal rib work point towards the first concreted section as the expanded metal rib work here is exposed to the most pressure. The expanded metal rib work is arranged cross-wise to the bracings.
• High-RIP® requires the same concrete coverage as reinforced concrete. In order to maintain the specified concrete coverage, the upper and underside of the component are fitted with wooden strips (3) as spacers and nailed to the bracings (2).
• The bracings (2) themselves are nailed to the formwork and held in place by wooden bars (4) supported by the existing armouring.
• The necessary subsequent armouring (5) is fed through the expanded metal rib work. High-RIP® is cut using the metal shears or the special RSM pin shears. Avoid cutting the expanded metal rib work if possible.
• Joint strips can be mounted in accordance with Figure 3. The joint strip (6) is arranged between two High-RIP® strips. High-RIP® is cut using the metal shears or the special RSM pin shears. In the bracings, gaps are provided for the joint strips.

Bracing intervals depending on the concrete height

<table>
<thead>
<tr>
<th>Concrete Height (m)</th>
<th>0.25</th>
<th>0.50</th>
<th>1.00</th>
<th>2.00</th>
<th>2.50</th>
<th>3.00</th>
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<tbody>
<tr>
<td>HRip 0.30</td>
<td>0.53</td>
<td>0.45</td>
<td>0.30</td>
<td>0.26</td>
<td>0.23</td>
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<td>0.40</td>
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<td>0.30</td>
<td>0.25</td>
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<td>0.80</td>
<td>0.60</td>
<td>0.45</td>
<td>0.40</td>
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<tr>
<td>HRip 0.75</td>
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<td>0.70</td>
<td>0.65</td>
<td>0.55</td>
<td>0.40</td>
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</tr>
</tbody>
</table>
Permanent concrete formwork

High-RIP® is designed in such a way that it can be placed closed to the edge rib of the neighbouring High-RIP® panel. This ensures solid joints across the entire length and the stiffness of the panel joints in the preparation stage is strengthened.

The intermediate ribs of the High-RIP® panels create the internal stiffness along the length of the panel allowing supports to be bridged. As a result of the reduced load, less support system are required.

The fixture of High-RIP® panels can be carried out either before or after the application of armouring.

In the first phase of the concrete pouring, the High-RIP® noses are integrated into the poured concrete, the panel is embedded securely and cannot move from the floor.

The run-off water is able to flow off well through the open honeycomb structure. This forms a solid and impenetrable layer of concrete on the upper side, directly behind the High-RIP® panel.

The risk of honeycomb like trapped air is minimised to the most part by the use of High-RIP®. Generally, when creating traditional formwork, air is trapped during the pouring of fresh concrete. The High-RIP® structure enables air to escape again, and the risk of trapped air is kept low.

The poured concrete can be seen and monitored better during the pouring stage.

For subsequent concreting stages, the preparation time is considerably reduced as a result of the use of High-RIP®. The light weight nature of the High-RIP® panels ensures that they can be handled easily.

The panel width of 445 mm reduces the cutting work and the volume of waste for small items.