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Corrosion BSF, BCC

- The units are protected by the high pH in the pre-mixed mortar that is poured into the joint after erection (see MEMO 4).

It has been argued that there might be air pockets in the mortar that might be indicators for possible corrosion attack. However,

- the combination of the high pH-environment,
 - the thickness of the total embedment as barrier for moisture, CO₂ and aggressive ions, and
 - the thickness of the loadbearing units versus spot-attack,
- makes corrosion attack highly unlikely.

We have confronted one of Norway's most merited corrosion experts, Prof. Øystein Vennesland at Norwegian University of Science and Technology in Trondheim with the problem, and he agrees to our conclusion.

- To avoid rusting , and thereby staining of the concrete units during outdoor storage at the precast factory or at the site, - it is common to protect the openings in the beams and columns by tape or foamed polystyrene. This avoids water and ice to fill up inside the connectors.

Many factories also paint the external surfaces of both the beam and the column unit, and sometimes the knife, with protective paint.

We recognize this as good practice and recommend this.

- In a few special cases we have supplied units in stainless steel.
Besides been costly, this also reduces the capacity of the units in the order of 20 %.