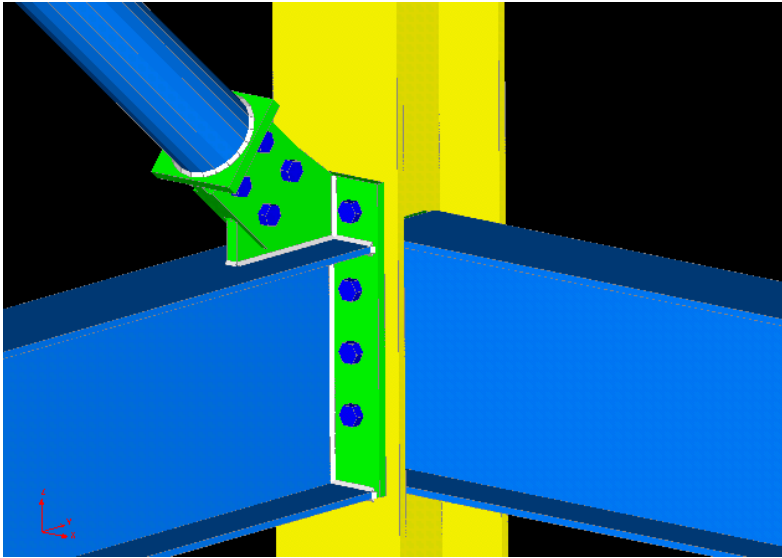
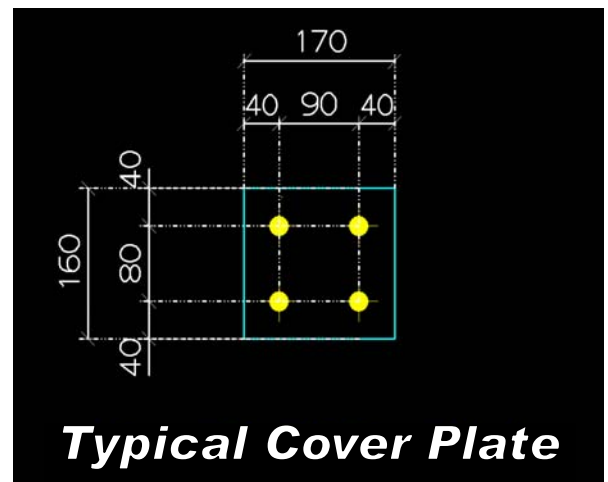
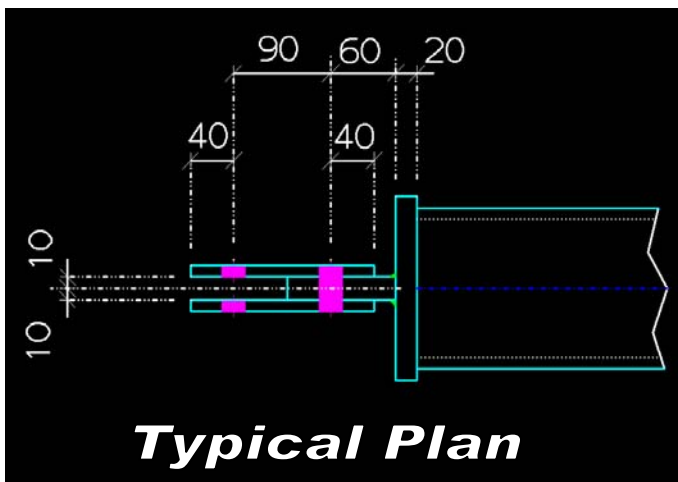


Cover Plate Bracing Connections

It is common practice when designing bracing connections to use side connecting plates and ignore the effects of eccentricity. This is acceptable practice on lightly loaded members but when the loads are large then the



effects of minor axis bending on the plate can prove critical. To overcome this “Cover Plate” connections can be used which keeps the load central and eliminates additional plate bending. Double shear values for the Bolts help keep the joint neat and compact.



Key Points:-

1. Forces are kept central so eliminates minor axis plate bending.
2. Bolts work in double shear so less bolts per side.
3. Less bolts per side generates smaller size brace plates and less painting.
4. Smaller brace plates means less weld length.
5. Thicker gusset plates and end tabs provide required bolt bearing.
6. Close tolerance holes or HSFG bolts can be used to prevent slippage.
7. Complex brace plate and weld calculations are not required.
8. High loads can be transferred if tab plate replaced by a forked end into the tube.

For further information contact Chris Achilles at Peers Tel - 01204 528393.