



**Peers Preferred Sections and General Section Information**

UB Sections	UC Sections	Equal Angles	Unequal Angles	PFC Sections
152x89x16UB	152x152x23UC	80x80x6L	80x60x6L	150x75PFC
178x102x19UB	203x203x46UC	90x90x6L	100x65x7L	180x75PFC
203x133x25UB	203x203x52UC	100x100x8L	125x75x8L	200x75PFC
254x146x31UB	203x203x60UC		150x75x10L	260x75PFC
305x165x40UB	254x254x73UC		200x100x10L	
356x171x45UB	305x305x97UC			
406x140x39UB	305x305x118UC			
406x171x54UB	356x368x129UC			
457x152x52UB	356x368x153UC			
457x191x67UB	356x368x177UC			
533x210x82UB	356x368x202UC			
610x229x101UB	356x406x235UC			

**Black Listed Members (Expensive or Hard to Source)**

1. Any 90 Wide Flanged Channels as they are not readily available so expensive - £200/T extra
2. Any Top/Mid range sections (e.g. 356x171x57ub) as uneconomical weight to strength ratio.
3. Large thick angles as not readily available so at a premium rate.- £100/T extra.
4. 140 deep or 180 deep box sections as not readily available. - £ 400/T extra
5. Tee sections are uneconomical and expensive. - £ 700/T - Very Poor Section Properties!
6. Thick wall box sections and CHS can prove uneconomical - £ 1000/T
7. 88.9x6.3CHS - Not readily available - £1200/T but long lead in.
8. Small angles less than 80mm wide - Can not go through CNC machine - Manual Fabrication so expensive Fab rate!

**Section or Grades which need Consideration**

1. Thin angle cross bracings - Is it thick enough to cater for bolt bearing? - More bolts and big plates!
2. 152uc post - Weight saving may be outweighed by fabrication costs i.e. notching incoming beams and bolt access.
3. Next weight sections i.e. 305x165x46ub, 356x171x45ub offers better properties.
4. Narrow sections i.e. 254x102x25ub - Poor slenderness ratio and temporary stability.
5. CHS or Box section Plan Bracings - Self weight deflection and P-Delta affects.
6. CHS or Box sections generally - Weight saving needs to be about 45 % for cost savings to be achieved.
7. CHS or Box Hot Rolled - Cold Formed is £ 250/T cheaper and readily available - Note - Strut curve C not A.
8. S275J2H CHS & SHS - Is not rolled in the UK so would switch to S355J2H. - Design as S355 to get savings!
9. S275JO for external sections can now be S275JR on lighter sections as BS5950 rules have been amended - £50/T.
10. Double notched beams - Is the connection acceptable - Make supporting member deeper? - Fab costs!
11. UC bracings - End connections can be very expensive - Switch to angle cross bracings if possible.

For Further information contact Chris Achilles at Peers (Tel 01204 528 393)