

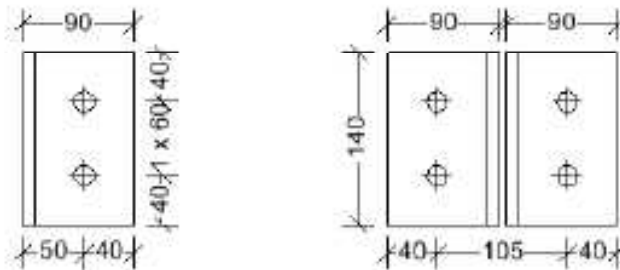
Project No	Example	Sht. No.	15 of 16
Site Address	Example		
Subject	Extension and alteration works – Supporting Calculations		
Engineer	Peter V	Date:	

BEAM A TO BEAM G - CLEAT CONNECTION

TEDDS calculation version 2.0.11

Section Details

- Supporting Beam - UC 203x203x46;; Grade_{supporting} = "S275"
- Supported Beam - 2no UB 178x102x19;; Grade_{supported} = "S275"
- Cleats 2 x RSA 90x90x10;; (140mm cleat length) Grade_{cleats} = "S275"
- 6no Bolts M16 (Grade 8.8)



Connection Details

- : Bolt eccentricity for supported beam; $a_{bolts} = 50 \text{ mm}$
- : number of bolt rows; $n_{bolts} = 2$
- : Bolt pitch;; $p_{bolts} = 60 \text{ mm}$
- : Bolt gauge; $g_{bolts} = 105 \text{ mm}$
- : End projection; $t_1 = 10 \text{ mm}$
- : Cleat end distance (top & bottom); $e_{cleats} = 40 \text{ mm}$
- : Cleat edge distance on supported beam; $e_{2cleatsupported} = 40 \text{ mm}$
- : Cleat edge distance on supporting beam; $e_{2cleatssupporting} = 40 \text{ mm}$
- : Cleat length; $l_{cleats} = p_{bolts} \times (n_{bolts} - 1) + 2 \times e_{cleats} = 140 \text{ mm}$
- : Supported Beam end reaction; $Q = 24.0 \text{ kN}$

Check 1 - Essential detailing requirements

NOTE: For Building Regulations Submission only, not for ordering materials. Principal Contractor is responsible for taking measurements on site, preparing construction drawings and safely erecting the proposed structural works. Team Design is not responsible for site supervision.