

LIST OF QUESTIONS

2 Bolting

3 Welding

3Q&A1 Connection of Two Angles to Gusset Plate

- 3Q&A2 Effective Width of Welded Beam-to-Column Connection
- 3Q&A3 Throat Thickness of Fillet Weld Used in Hollow Section Joints

3Q&A4 Modelling of Fillet Weld Resistance

3Q&A5 Design of Partially Penetrated Butt Weld

3Q&A6 Weld Design for Full Resistance of Connecting Members

3Q&A7 Effective Width of Welded Beam-to-Column Connection

4 Structural modelling

4Q&A1 Preliminary Design of Connections

4Q&A2 Use of Elastic Theory for Global Analysis of Structures

4Q&A3 Classification Criteria for Column Bases

4Q&A4 Design of Connections Loaded by Low Forces

4Q&A5 Modelling of Joint Eccentricity in Frame Design

4Q&A6 Design of Bridge Connections

5 Simple connections

6 Moment resistance connections

6Q&A1 Stiffness Modification Coefficient η for End-Plated Connections

6Q&A2 Formula for Coefficient α of Effective Length of T-stub

6Q&A3 Rules for Design of Haunched Connections

6Q&A4 Rules for Diagonal and K-stiffeners

6Q&A5 Yield line Patterns for Row with 4 Bolts

6Q&A6 Plastic Distribution of Forces on End Plated Connection with Very Thick Plate

6Q&A7 Distribution of Shear Forces on Bolted Connection

6Q&A8 Prying Force of T-stub in Fatigue Design

6Q&A9 Calculation of Joint Properties Loaded by Bending Moment and Axial Force

7 Column bases

7Q&A1 Elastic Resistance of Base Plate

7Q&A2 Calculation of Base Plate Resistance with Low Quality Grout

7Q&A3 Stress Concentration Factor k_i for Column Bases

7Q&A4 Effective Length of Base Plate T-stub

7Q&A5 Effective Length of Base Plate with Bolts Outside the Column Flange Width

7Q&A6 Slip Factor between Steel and Concrete

7Q&A7 Transfer of Shear Forces by Friction and Anchor Bolts

7Q&A10 Rules for Anchorage of Holding Down Bolts

8 Seismic design

8Q&A1 Design of Connections Subject to Dynamic Load



- 8Q&A2 Influence of Unsymmetrical Loading
- 8A&A3 Influence of Strain-Rate Loading
- 8Q&A4 Influence of Welding Technology and Detailing
- 8Q&A5 Use of HSFG Bolts as Ordinary Bolts in Seismic Joints
- 80&A6 Importance of Column Web Panel Behaviour (Stiffeners)

9 Fire design

- 9Q&A1 Bolts Resistance at High Temperature
- 9Q&A2 Weld Resistance at High Temperature
- 9Q&A3 Temperature Distribution with Time within Joint
- 9Q&A4 Steel-Joint Behaviour under High Temperatures

10 Hollow section joints

11 Cold-formed member joints

- 11Q&A1 Increased Yield Strength of Cold-Formed Sections
- 11Q&A2 Ductility of Shear Connections
- 11Q&A3 Resistance of Screws in Sandwich Panels
- 11Q&A4 Shear Resistance of Screw
- 11Q&A5 Bearing Resistance of Thin Plates

12 Aluminium connections

- 12Q&A1 Resistance of Fillet Welds
- 12Q&A2 Effective Width and Throat Thickness of Fillet Welds
- 12Q&A3 Butt welds in aluminium joints
- 12Q&A4 Heat Affected Zones (HAZ)
- 12A&Q5 Friction grip bolted joints