

#### GUIDELINES

- Beam HEA200, Column HEA200
- End Plate
  - Dimensions 400x400 mm
  - Thickness 2x210 mm
  - Steel type Fe430
- Bolts
  - Diameter Ø20 mm
  - Class Bolt 5.6
  - Hole tolerance 0.1 mm
- Welding
  - Minimum Thickness 19 mm

Unless otherwise prescribed, all weldings in joints shall be full penetration or double fillet, wide not less than the thickness of the members being connected.

#### Technical Notes:

Structural elements are calculated and designed with following characteristics:

**Foundation:** Foundations are designed with plinths:

- Concrete C-25/30 ( $f_{ck}=25000\text{kN/m}^2$ ) with safety factor  $\gamma_c=1.5$
- Reinforcement FeB 42k ( $f_{ys}=420\text{N/mm}^2$ ) with safety factor  $\gamma_s=1.15$

**Concrete Walls & Columns:** All walls & columns are designed with:


- Concrete C-25/30 ( $f_{ck}=25000\text{kN/m}^2$ ) with safety factor  $\gamma_c=1.5$
- Reinforcement FeB 42k ( $f_{ys}=420\text{N/mm}^2$ ) with safety factor  $\gamma_s=1.15$


**Concrete Beams:** Beams for all stories are designed with:

- Concrete C-25/30 ( $f_{ck}=25000\text{kN/m}^2$ ) with safety factor  $\gamma_c=1.5$
- Reinforcement FeB 42k ( $f_{ys}=420\text{N/mm}^2$ ) with safety factor  $\gamma_s=1.15$

**Concrete Slab:** Slabs for all stories are designed with:

- Concrete C-25/30 ( $f_{ck}=25000\text{kN/m}^2$ ) with safety factor  $\gamma_c=1.5$
- Reinforcement FeB 42k ( $f_{ys}=420\text{N/mm}^2$ ) with safety factor  $\gamma_s=1.15$

		<b>Water Solutions Pvt Ltd</b> 1st Floor, Ma.Fas eri, Ameenee Magu, Male' 20205, Republic of Maldives Tel: +960 334 1643 / +960 330 1643 Fax: +960 333 1643 Email: info@water-solutions.biz	<b>KOCKS ENGINEERS</b>	<b>Kocks Consult GmbH</b> Stegemannstr. 32 - 38 D-56068 Koblenz Tel: +49 261 1302-0 Fax: +49 261 1302-400 Email: info@kocks-ing.de
		Name		
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Client		<b>Ministry of Environment and Energy</b>		
Project Title	Consultancy Services for Feasibility Study for an Integrated Solid Waste Management System for Zone III (including Greater Malé) and Preparation of Engineering Design of the Regional Waste Management Facility at Thilafushi			
Design phase	Detailed Design Harbour Rehabilitation			
Contents	Administration Building - Steel - Main Frame			
Scale	1 : 5			
Drawing No.	3.3.3	Paper	A3	