

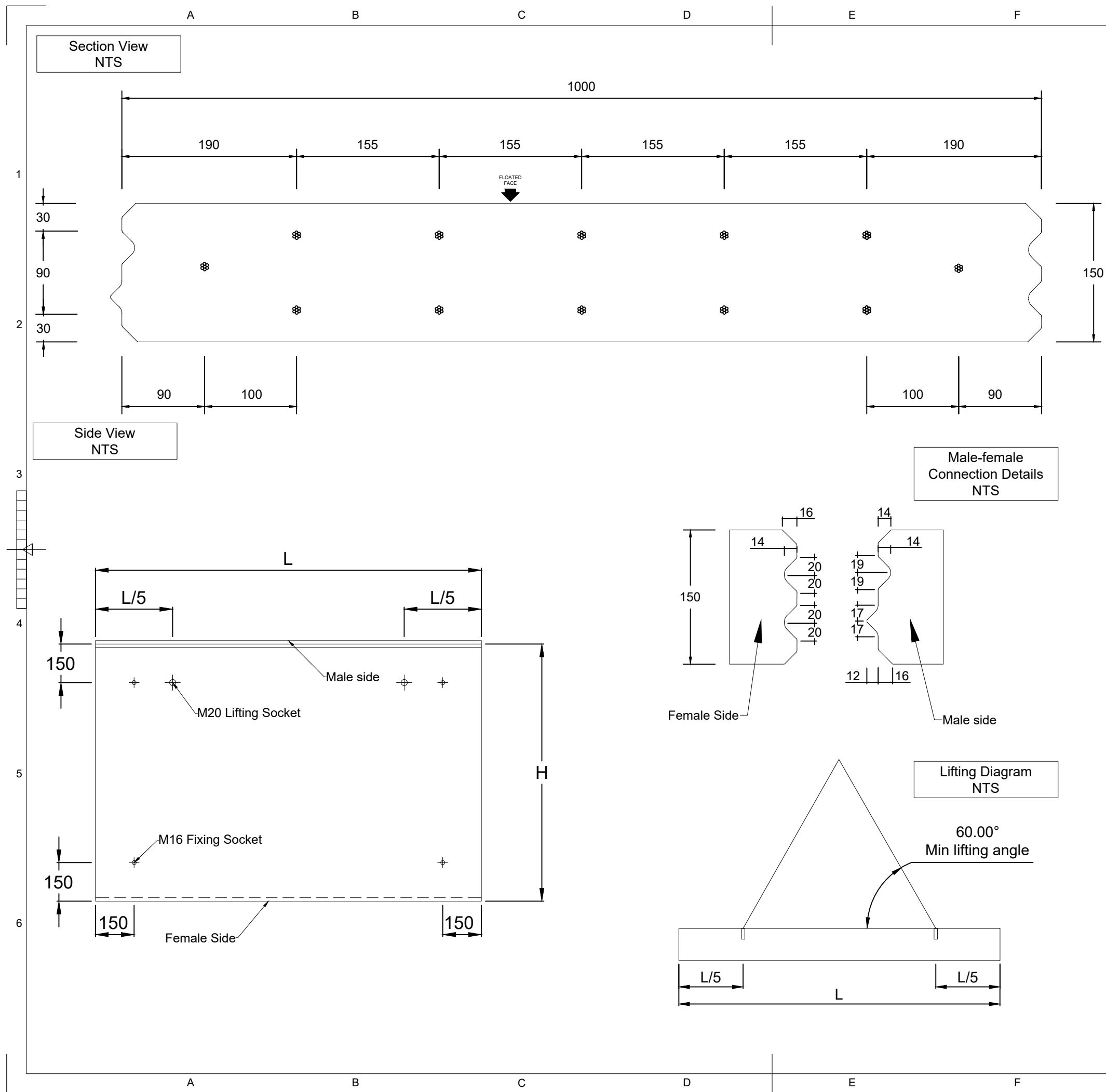
- 1. Design**
- a) Concrete Beam design to BS EN 1992-1-1:2004;
 - b) Permissible SLS characteristic bending moment = 24.3 kNm per 1000mm panel;
 - c) ULS moment of resistance = 39.2 kNm per 1000mm panel;
 - d) ULS shear resistance = 82.8 kN per 1000mm panel ;
- Note: JP Concrete have designed the concrete unit only, the stability of the support conditions should be checked by overall scheme designer.**
- 2. Concrete**
- a) Concrete strength at transfer = C32/40 ;
 - b) Concrete strength at 28 days = C50/60 ;
 - c) Other: CEM I, minimum Cement content: 360kg/m³ Max W/C = 0.50 ;
- 3. Prestressing Strand**
- a) Strand Diameter = 9.3mm ;
 - b) Strand designation = BS5896-Y1860S7-9.3-I (Strand Jacking force: 64.4kN);
- 4. Durability**
- a) Design Life: 50 years to BS8500;
 - b) Fire Resistance: 60min (REI 60) BS EN 1992-1-2 Table 5.8 (One way Spanning);
 - c) Cover to Strand & Exposure:
- | Min Cover | All | Exposure | | | |
|-----------|------|-----------|-----|-----|-----|
| All Faces | 30mm | All Faces | XC4 | XA1 | XF1 |
- 5. Handling**
- a) Unit Volume / Weight
- | Unit Ref | Volume (m³/m) | Weight (T/m) | Weight + 5% (T/m) |
|---------------|---------------|--------------|-------------------|
| 150x1000 10no | 0.15 | 0.38 | 0.40 |
- Weight is based on 2.5 T/m³. +5% is recommended for sizing lifting equipment.
- 6. Manufacture**
- a) Manufactured to BS 8110.
- 7. Tolerances**
- a) Length -5mm to +10mm;
 - b) Width -0mm to +6mm;
 - c) Thickness -2mm to +6mm;
 - d) Squareness 12mm difference between diagonals;
 - e) Socket position ± 10mm;
 - f) Lifter Position ± 100mm.
 - g) Flatness ± 3mm in any 1.5m direction.
- 7. Finish**
- Please refer to the attached document regarding JP concrete's panel finishes and spec.
- 8. Disclaimer**
- This document has been created in accordance with JP Concrete Products Limited Terms & Conditions along with the scope of works provided by the client to JP Concrete Products Limited. Any use of this document other than for its original purpose is prohibited, JP Concrete Products Limited accept no liability for any third party uses of this document;
- JP Concrete Products Limited is to be immediately notified of any suspected omissions or discrepancies;
- All dimensions noted are in millimeters unless stated otherwise;
- This drawing is to be read in conjunction with all other relevant documents relating to the project;
- Do not scale from this drawing, if dimensions are not clear, please ask.

First Issue	JM	FM	16/09/2020
Revision/Description	Drawn	Checked	Date
Title, Supplementary title			

Prestressed Panels	
150 x 1000 10 no 9.3 diameter	
Identification number	Created by
150x1000_10no9.3	JM
Document type	Technical reference
Information use	FM
Document Status	Approved by
Released	TM



Plot Date	Paper size	Revision	Sheet
16/12/2020	A3	P01	1/1



- 1. Design**
- a) Concrete Beam design to BS EN 1992-1-1:2004;
 - b) Permissible SLS characteristic bending moment = 31.2 kNm per 1000mm panel;
 - c) ULS moment of resistance = 51.8 kNm per 1000mm panel;
 - d) ULS shear resistance = 90.8 kN per 1000mm panel ;
- Note: JP Concrete have designed the concrete unit only, the stability of the support conditions should be checked by overall scheme designer.**
- 2. Concrete**
- a) Concrete strength at transfer = C32/40 ;
 - b) Concrete strength at 28 days = C50/60 ;
 - c) Other: CEM I, minimum Cement content: 360kg/m³ Max W/C = 0.50 ;
- 3. Prestressing Strand**
- a) Strand Diameter = 9.3mm ;
 - b) Strand designation = BS5896-Y1860S7-9.3-I (Strand Jacking force: 64.4kN);
- 4. Durability**
- a) Design Life: 50 years to BS8500;
 - b) Fire Resistance: 60min (REI 60) BS EN 1992-1-2 Table 5.8 (One way Spanning);
 - c) Cover to Strand & Exposure:
- | Min Cover | All | Exposure | | | |
|-----------|------|-----------|-----|-----|-----|
| All Faces | 30mm | All Faces | XC4 | XA1 | XF1 |
- 5. Handling**
- a) Unit Volume / Weight
- | Unit Ref | Volume (m³/m) | Weight (T/m) | Weight + 5% (T/m) |
|---------------|---------------|--------------|-------------------|
| 150x1000 12no | 0.15 | 0.38 | 0.40 |
- Weight is based on 2.5 T/m³. +5% is recommended for sizing lifting equipment.
- 6. Manufacture**
- a) Manufactured to BS 8110.
- 7. Tolerances**
- a) Length -5mm to +10mm;
 - b) Width -0mm to +6mm;
 - c) Thickness -2mm to +6mm;
 - d) Squareness 12mm difference between diagonals;
 - e) Socket position ± 10mm;
 - f) Lifter Position ± 100mm.
 - g) Flatness ± 3mm in any 1.5m direction.
- 7. Finish**
- Please refer to the attached document regarding JP concrete's panel finishes and spec.
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Revision/Description	Drawn	Checked	Date
Title, Supplementary title			
Prestressed Panels			
150 x 1000 12 no 9.3 diameter			
Identification number	Created by		
150x1000_12no9.3	JM		
Document type	Technical reference		
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