PSA S-CONNECTION 'M' MALE

PANEL THICKNESS (mm)*

PART No.	200	PART No.	250	PART No.	300
SCON-M-200-L	INLET ON NF / INLET ON FF	SCON-M-250-L	INLET ON NF / INLET ON FF	SCON-M-300-L	INLET ON NF / INLET ON FF
SCON-M-200-R	INLET ON FF / INLET ON NF	SCON-M-250-R	INLET ON FF / INLET ON NF	SCON-M-300-R	INLET ON FF / INLET ON NF

* CONTACT PSA FOR OTHER PANEL THICKNESSES.

PSA S-CONNECTION 'F' FEMALE

PANEL THICKNESS (mm)*

PART No.	200	PART No.	250	PART No.	300
SCON-F-200-L	INLET ON FF / INLET ON NF	SCON-F-250-L	INLET ON FF / INLET ON NF	SCON-F-300-L	INLET ON FF / INLET ON NF
SCON-F-200-R	INLET ON NF / INLET ON FF	SCON-F-250-R	INLET ON NF / INLET ON FF	SCON-F-300-R	INLET ON NF / INLET ON FF
SCON-F-200-O	INLET ON FF	SCON-F-250-O	INLET ON FF	SCON-F-300-O	INLET ON FF

* CONTACT PSA FOR OTHER PANEL THICKNESSES.

PSA S-CONNECTION 'F' FEMALE FOR CORNER

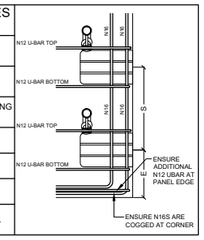
PART No.	INDEPENDENT OF THE PANEL THICKNESS*
SCON-F-DB-L	
SCON-F-DB-R	

* CONTACT PSA FOR OTHER PANEL THICKNESSES.

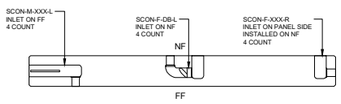
RECOMMENDED SPACINGS AND EDGE DISTANCES TO ACHIEVE FULL CAPACITY

CONCRETE STRENGTH (MPa)	PANEL THICKNESS (mm) 200 EDGE 'E'	200 SPACING 'S'	250 EDGE 'E'	250 SPACING 'S'	300 EDGE 'E'	300 SPACING 'S'
40	500	700	400	600	350	550
50	450	650	350	550	300	500
65	400	600	300	500	250	450

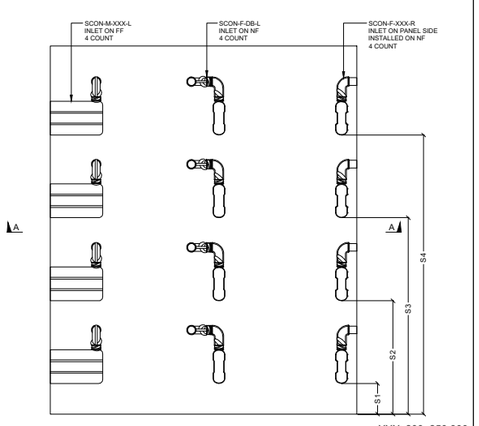
* ONLY THE REQUIRED SUPPLEMENTARY REBARS ARE SHOWN.



TYPICAL PRECAST PANEL SHOP DRAWING - S-CON POSITIONING & TOLERANCES



SECTION A-A

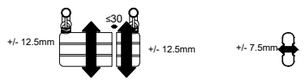


PLAN VIEW

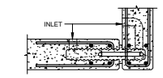
XXX: 200, 250,300
NF: NEAR FACE
FF: FAR FACE

TOLERANCE

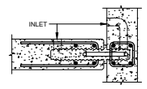
- MAXIMUM VERTICAL ADJUSTMENT: ±25 MM.
- MAXIMUM HORIZONTAL ADJUSTMENT: ±15 MM.
- EXCEEDING TOLERANCES MAY PREVENT ENGAGEMENT OR REDUCE CAPACITY.



TYPICAL DETAILS FOR S-CON-F-DB*



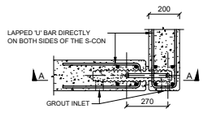
TYPICAL CORNER CONNECTION WITH S-CON-F-DB



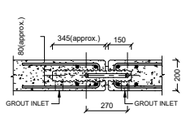
TYPICAL RETURN CONNECTION WITH S-CON-F-DB

* ONLY THE REQUIRED SUPPLEMENTARY REBARS ARE SHOWN.

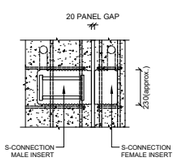
TYPICAL DETAILS FOR 200MM THICK PANEL*



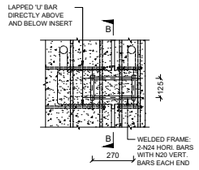
TYPICAL 'CORNER' CONNECTION



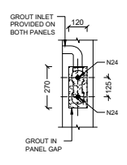
TYPICAL 'STRAIGHT' CONNECTION



SECTION A-A
CONNECTION NOT ENGAGED



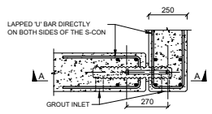
SECTION A-A
CONNECTION ENGAGED AND GROUTED



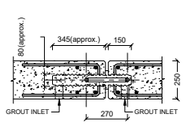
SECTION B-B

* ONLY THE REQUIRED SUPPLEMENTARY REBARS ARE SHOWN.

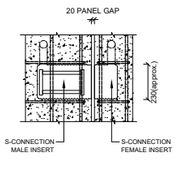
TYPICAL DETAILS FOR 250MM THICK PANEL*



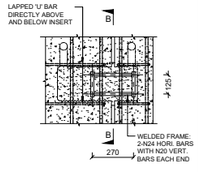
TYPICAL 'CORNER' CONNECTION



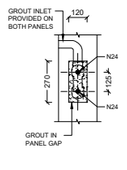
TYPICAL 'STRAIGHT' CONNECTION



SECTION A-A
CONNECTION NOT ENGAGED



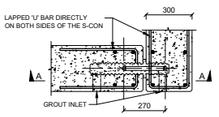
SECTION A-A
CONNECTION ENGAGED AND GROUTED



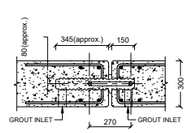
SECTION B-B

* ONLY THE REQUIRED SUPPLEMENTARY REBARS ARE SHOWN.

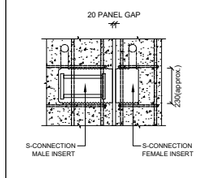
TYPICAL DETAILS FOR 300MM THICK PANEL*



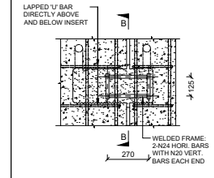
TYPICAL 'CORNER' CONNECTION



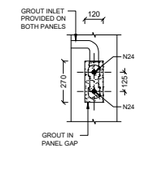
TYPICAL 'STRAIGHT' CONNECTION



SECTION A-A
CONNECTION NOT ENGAGED



SECTION A-A
CONNECTION ENGAGED AND GROUTED



SECTION B-B

* ONLY THE REQUIRED SUPPLEMENTARY REBARS ARE SHOWN.

DESIGN & SPECIFICATION NOTES

- MINIMUM PANEL THICKNESS SHALL BE 200 MM.
- MINIMUM CONCRETE COMPRESSIVE STRENGTH SHALL BE 40 MPA.
- MINIMUM REINFORCEMENT SHALL BE 2-N16 VERTICAL BARS EACH FACE WITH N12 U-BARS ABOVE AND BELOW CONNECTION.
- CONNECTIONS SHALL BE CENTRALLY LOCATED IN PANEL UNLESS OTHERWISE SPECIFIED.
- MINIMUM EDGE DISTANCE AND SPACING SHALL BE IN ACCORDANCE WITH PSA DESIGN GUIDE TABLES.
- REDUCED SPACING SHALL RESULT IN REDUCED CAPACITY AND MUST BE VERIFIED AGAINST DESIGN TABLES.
- DESIGN CAPACITIES ARE BASED ON HIGH-STRENGTH PSA CONNECTION GROUT.
- ENSURE THE GROUT INLET & OUTLET OF MALE AND FEMALE UNITES ARE ON THE SAME SIDE.

PRECAST INSTALLATION NOTES

- FOLLOW PSA S-CONNECTION PRECAST YARD INSTALLATION GUIDE.
- VERIFY ALL COMPONENT PART NUMBERS AGAINST SHOP DRAWINGS PRIOR TO INSTALLATION.
- ENSURE CORRECT ORIENTATION (LEFT/RIGHT) AND FACE LOCATION (NF/FF).
- CONNECTION HOUSINGS SHALL BE INSTALLED LEVEL, CENTRAL AND SECURELY FIXED TO FORMWORK. USE SCON CHAIR FOR ACCURATE INSTALLATION.
- ALL GROUT INLET/OUTLET CAPS SHALL BE FLUSH WITH PANEL FACE.
- REINFORCEMENT SHALL BE INSTALLED AS PER DRAWINGS AND INTEGRATED WITH CONNECTION.
- INSPECT ALL CONNECTIONS AFTER POUR FOR MOVEMENT OR MISALIGNMENT.
- CONTACT PSA FOR RECTIFICATION IF ANY MISPLACEMENT IS IDENTIFIED.

SITE INSTALLATION AND GROUTING

- FOLLOW PSA S-CONNECTION ON-SITE INSTALLATION GUIDE.
- CONNECTION MUST BE FULLY FILLED WITH PSA CONNECTION GROUT (CLASS C, APPROX. 100 MPA).
- APPROX. 10 KG GROUT REQUIRED PER CONNECTION (1 PSA GROUT BAG PER 2 CONNECTIONS).
- BACKING ROD SHALL BE INSTALLED TO FORM U-SHAPED GROUT SEAL.
- RECOMMENDED JOINT WIDTH = 16-20 MM FOR OPTIMAL INSTALLATION.
- MAXIMUM GAP WIDTH: 30 MM.
- GROUT MUST BE VISIBLE AT OUTLET TO CONFIRM FULL FILLING.

DRAWN	APPROVED	REV.	DATE
N.M.	A.B.	A	06.10.2025
N.M.	M.H.	B	04.06.2026
N.M.	M.H.	C	21.10.2026

PRODUCT RANGE:

PSA S-CONNECTION

DESIGN RECOMMENDATIONS AND STANDARD DETAILS - PDF

SHEET No:	S001
REVISION:	C
SCALE:	1:40@A3

PSA

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