

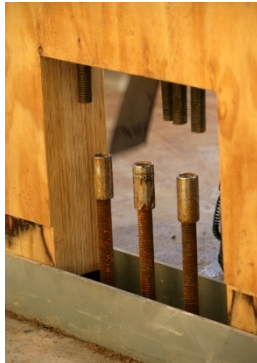
NMIT – Arts and Media Building



**The worlds first post tensioned
timber rocking shear wall building**



Energy
Dissipaters



Post tensioning
tendons



Timber Rocking
Walls

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Design Team

Structural Engineers: Aurecon New Zealand Ltd

Architect: ISJ Architects – Nelson

Peer Reviewer: Dunning Thornton – Wellington
University of Canterbury

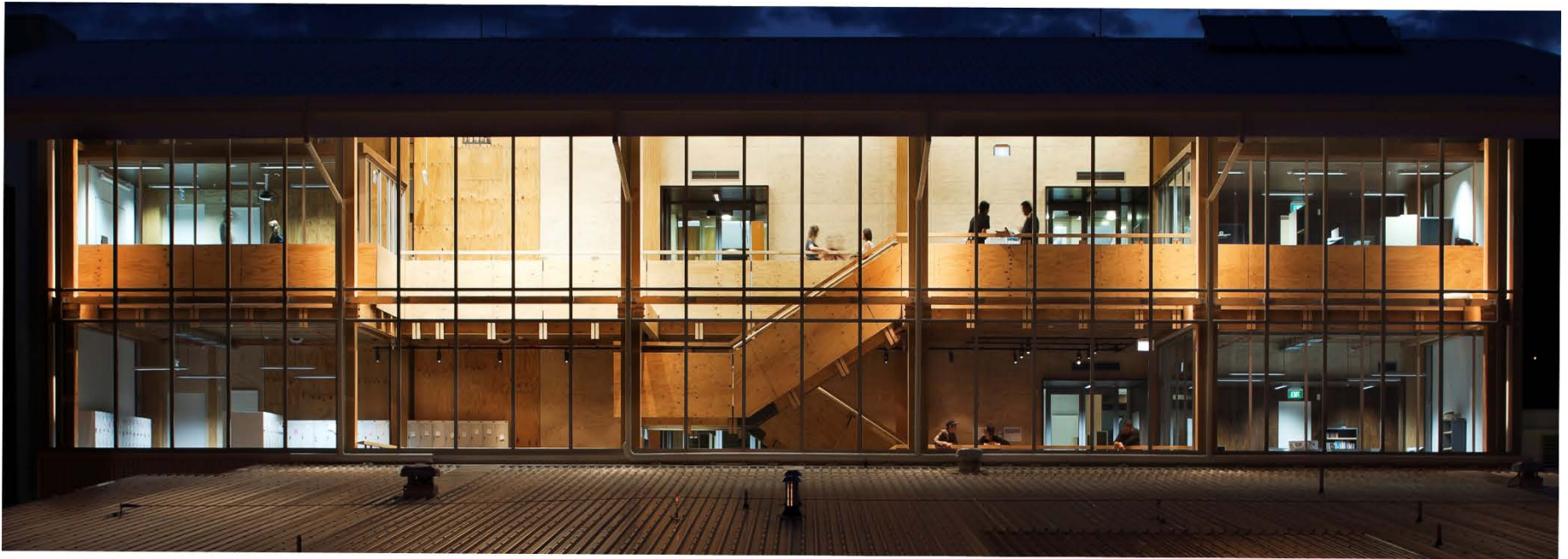
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Key Design Innovations

1. Multi-storey LVL gravity frames
2. Long span timber / concrete composite beams
3. Stressed skin floor panels
4. **Post Tensioned Shear Walls**

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THE PROCESS
 PULL WASHER AND TIGHTEN PRIMARY NUT.
 PULL LOCK NUT AND UNTIGHTEN PRIMARY NUT AGAINST LOCK NUT.

Lock Nut Configuration - All Walls
 scale

Shearwall at Grid E (Floor connection)
 scale

ACCESS PANELS

Shearwall at Grid E (Grid L similar)
 scale

ACCESS PANELS OMITTED TO REVEAL PACKALLET BARS AND FITTINGS

Shearwall at Grid 8 (Grid 6 similar)
 scale

CC	05/10/18	ISSUED FOR CONSENT/TENDER	BAC	DHC	CPD
SI	05/10/18	ISSUED FOR COORDINATION	BAC		
Rev	Date	Revision Details	DN	Var	App

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ARTS AND MEDIA BUILDING

Project Team
 Irving Smith Jack
 ARCHITECT
ARROW
 PROJECT MANAGEMENT

Drawing Title
 ARTS
 LVL SHEAR WALLS
 3D VIEWS

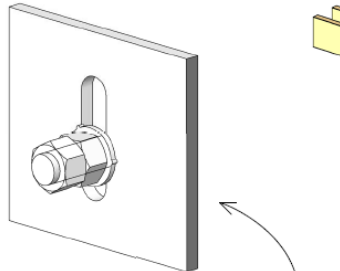
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BAC	BAC	05/10/18	DEG	DEG	05/10/18

Designed	Checked	Date	Approved	Checked	Date
SMJ	SMJ	05/10/18	CPD	CPD	05/10/18

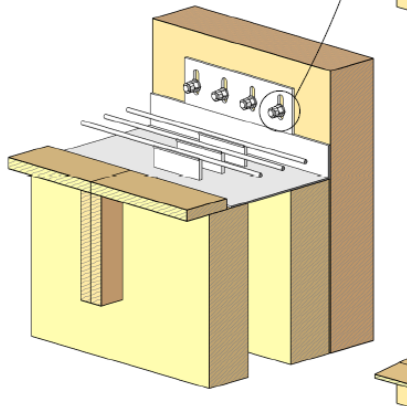
Project No: 37718.002
 Drawing No: S37.002
 Sheet No: A1
 Revision: 02

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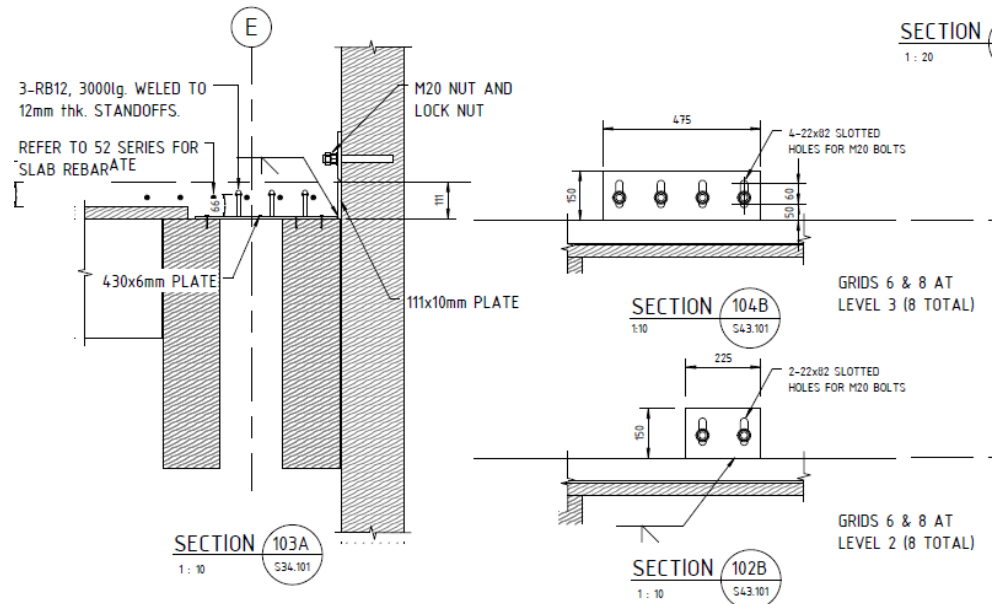
THE PROCESS:
 FIX WASHER AND TIGHTEN PRIMARY NUT.
 FIX LOCK NUT AND UNTIGHTEN PRIMARY NUT AGAINST LOCK NUT.



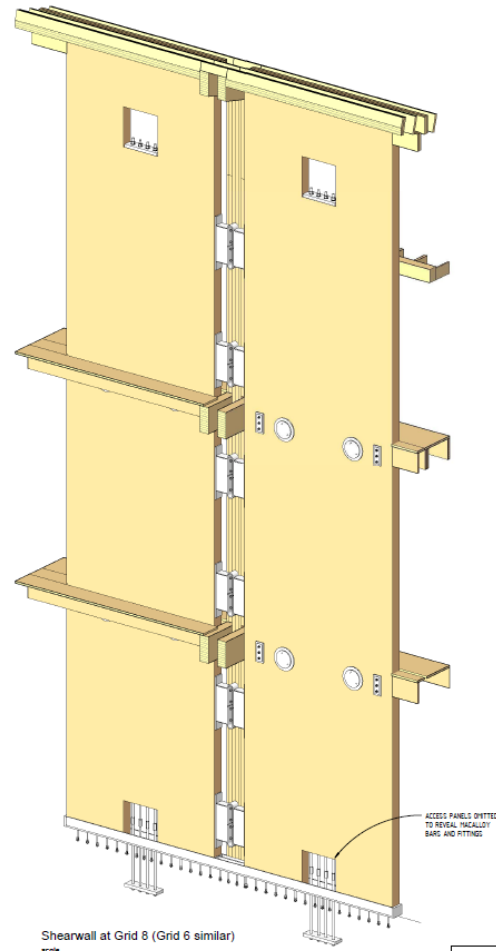
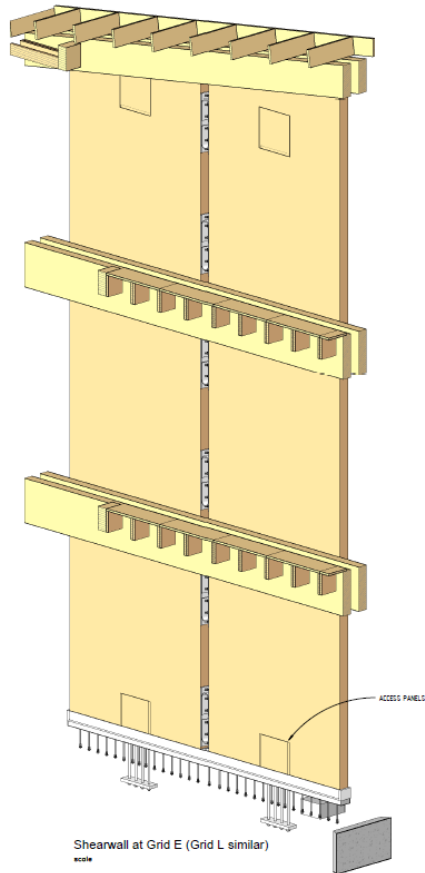
Lock Nut Configuration - All Walls
 scale



Shearwall at Grid E (Floor connection)
 scale



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A.	22.01.10	ISSUED FOR CONSTRUCTION	BAC	GIC	OPD
ES.	20.10.20	ISSUED FOR CONSENT/TENDER	BAC	GIC	OPD
DI.	22.10.20	ISSUED FOR COORDINATION	BAC		
Rev	Date	Revision Details	Drn	Var	App

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ARTS AND MEDIA BUILDING

Project Team

Irving Smith Jack
ARCHITECTS

ARRAW
PROJECT MANAGEMENT

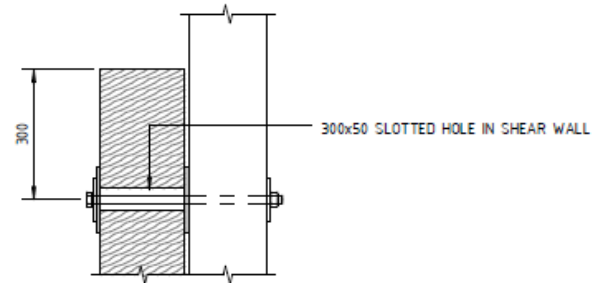
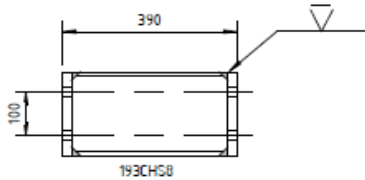
Drawing Title
 ARTS
 LVL SHEAR WALLS
 3D VIEWS

Drawn	Checked	Verified	Approved	Checked	Date
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OPD	OPD	OPD	OPD	OPD	08.10.20

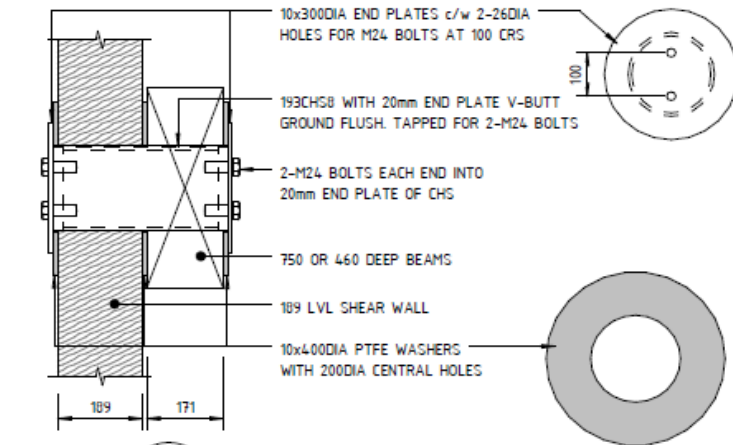
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Drawing No.	S37.002	Revision	A

FOR CONSTRUCTION

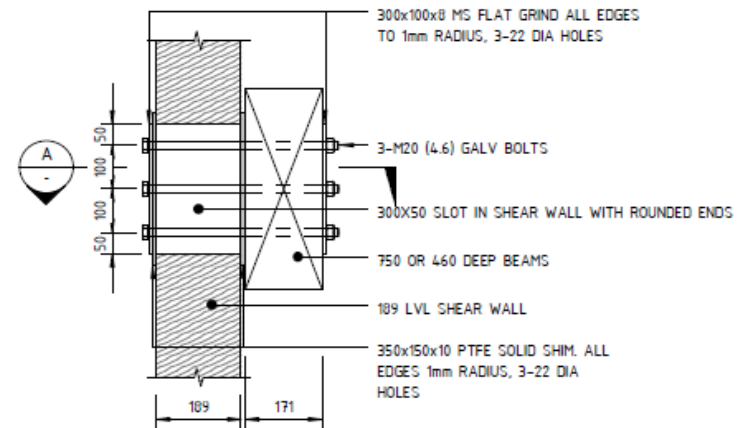
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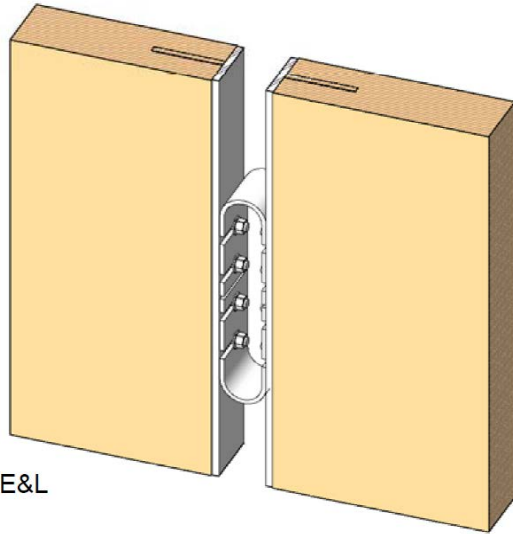
SECTION A
1:10



SECTION 1
1:10 SHEAR WALL PIVOT POINT DETAIL

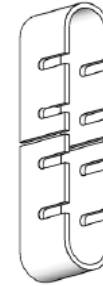
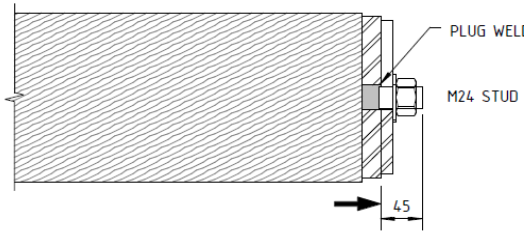


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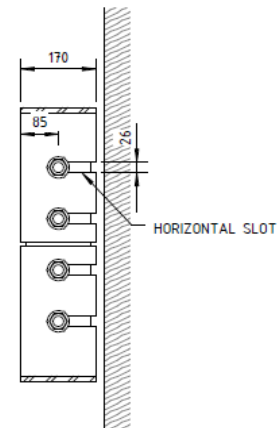
EDD - GRIDS E&L

scale



EDD PLATES ISOLATED

scale

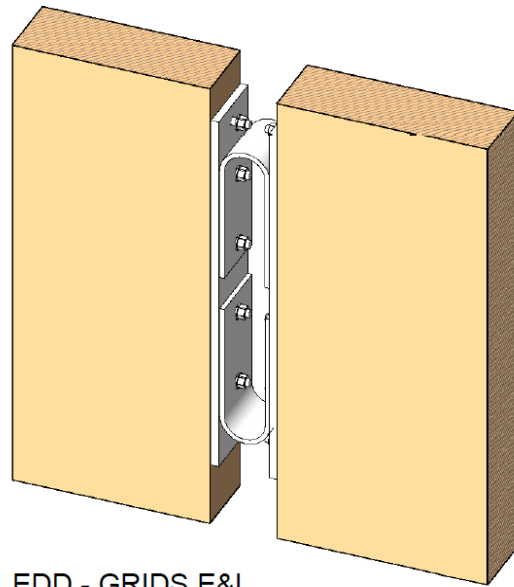


SECTION 601B

1 : 10

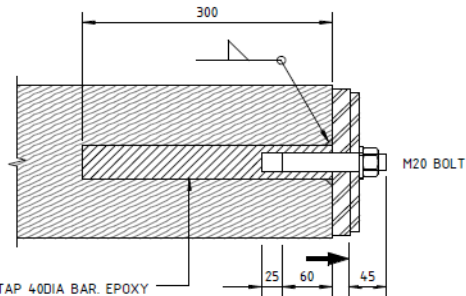
S37.003

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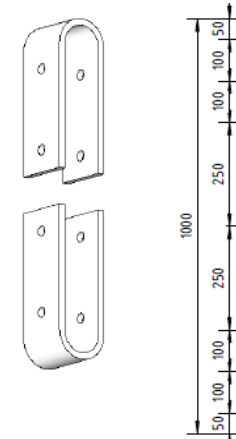


EDD - GRIDS E&L

scale
501C

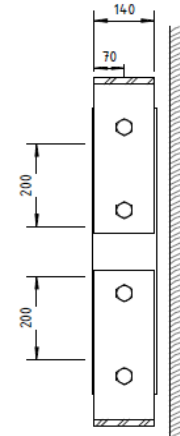


DRILL & TAP 40DIA BAR, EPOXY (K80) INTO 54DIA HOLE IN LVL



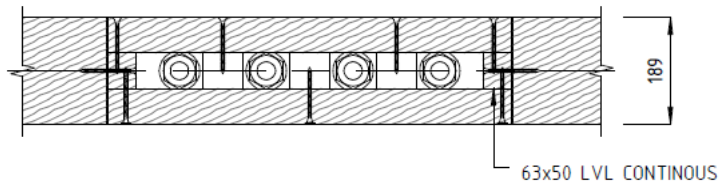
EDD PLATES ISOLATED

scale



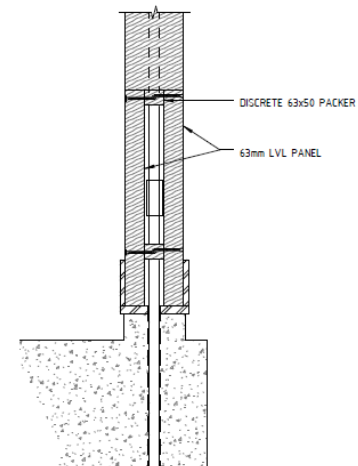
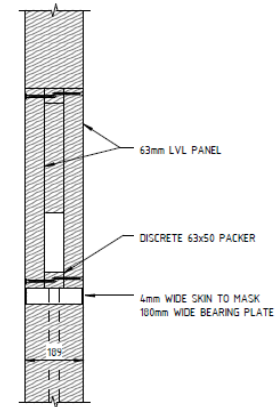
SECTION 601B
1 : 10 S37.003

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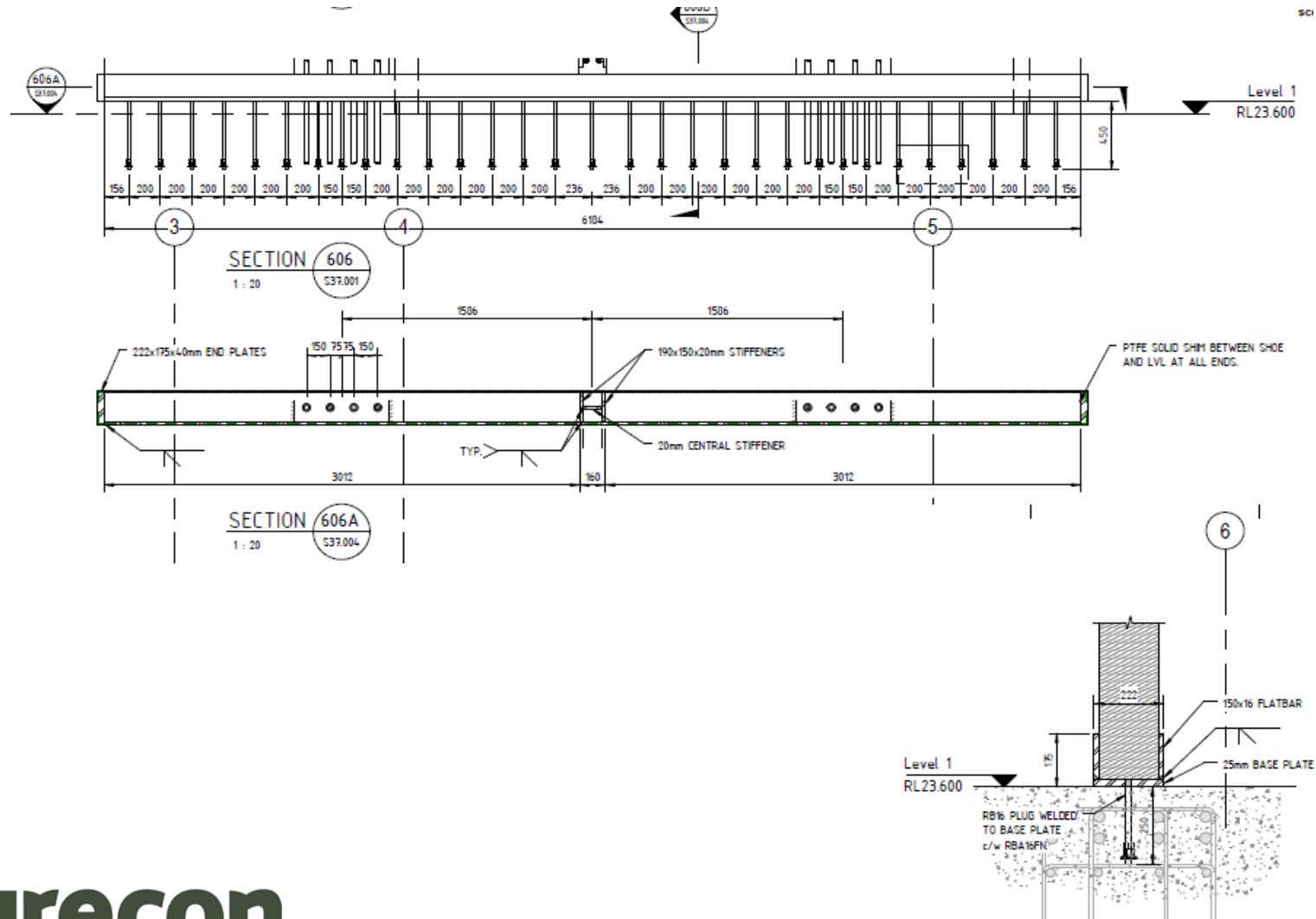
INFILL PANELS DETAILS - PLAN

scale 1 : 10



PANEL DETAILS - VERTICAL SECTION

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Questions?

