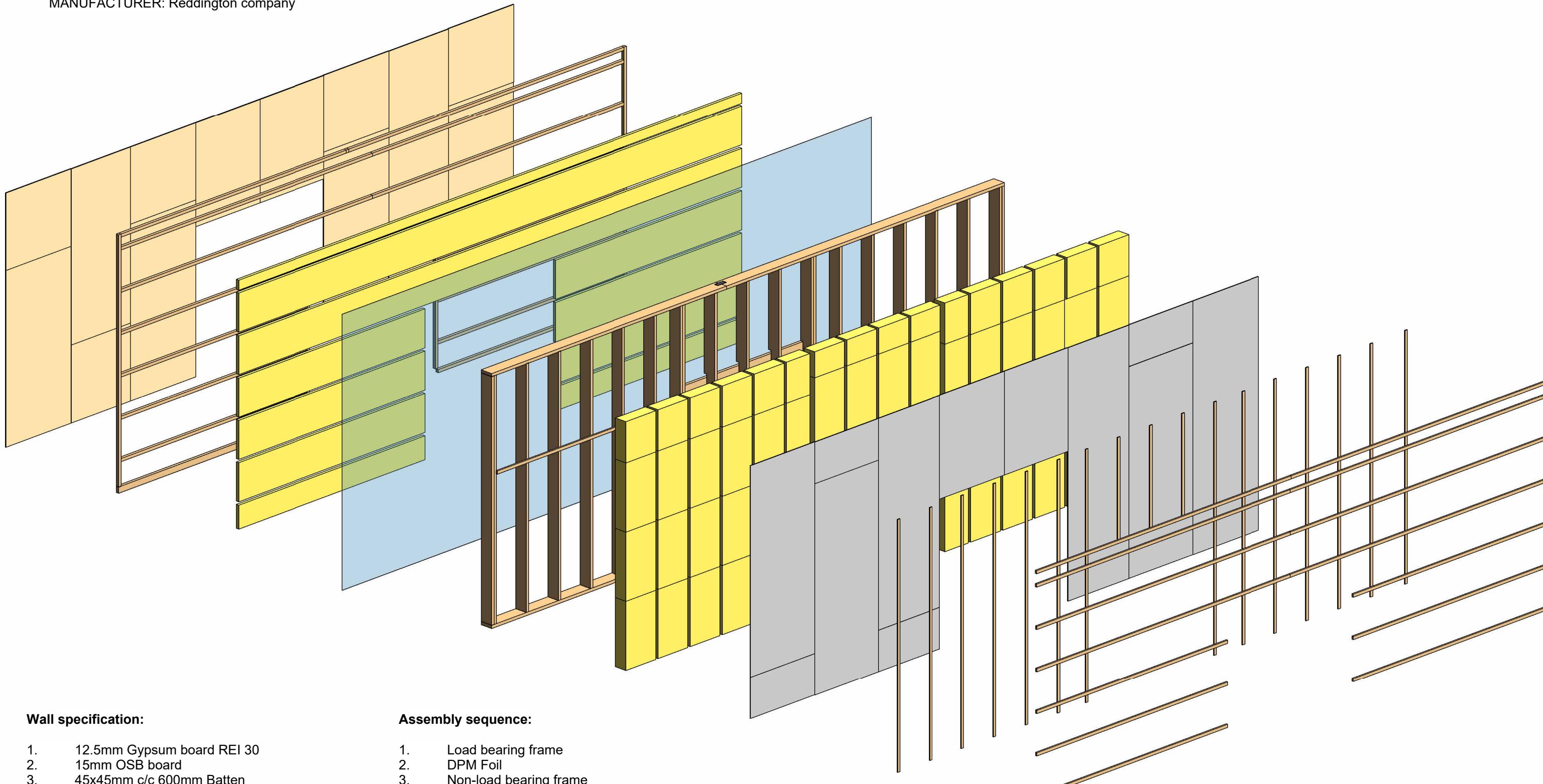


PRODUCTION OF PREFABRICATED WOODEN WALL ELEMENT

WALL IDENTIFICATION CODE: WS - 14
 PROJECT: Multi purpose sports hall
 ELEMENT TYPE: External wooden wall element
 MANUFACTURER: Reddington company



Wall specification:

1. 12.5mm Gypsum board REI 30
2. 15mm OSB board
3. 45x45mm c/c 600mm Batten
4. 45mm Mineral wool insulation - Glass Wool
5. 0.2mm DPM
6. 45x195mm Wooden stud
7. 195mm Mineral wool insulation - Glass wool
8. 9mm Wind barrier – Fiber cement
9. 12mm c/c 600mm Distance strip
10. 25x45 Batten
11. 21mm Wooden cladding

Assembly sequence:

1. Load bearing frame
2. DPM Foil
3. Non-load bearing frame
4. Mineral wool insulation
5. OSB Board
6. Flipping the element
7. Mineral wool insulation
8. Windbreaker fibre cement board
9. Distance strip
10. Horizontal battens

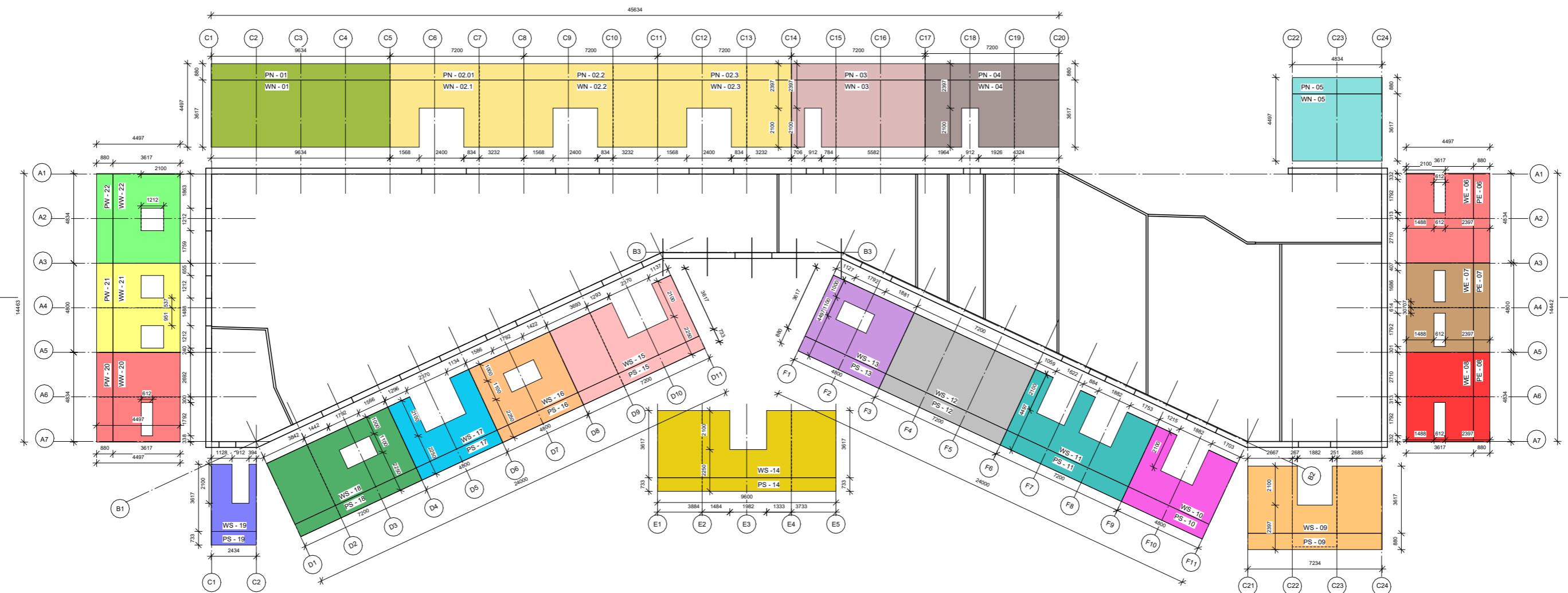
PROJECT: Multi purpose sports hall	DATE: 01/12/2023	 
SUBJECT: Production of prefabricated wooden wall element		
DRAWN BY: Abigail Goodman	SCALE:	

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Element plan

Page 2



QUALITY CONTROL

Tender Control Plan

Case: MULTI-PURPOSE SPORTS HALL	No. of case:	Date: 23/11/23 Rev:	Page 3 of 45
Location:	Contract/building component: WOOD EXTERNAL WALL		

Operation No.:	Subject	Method/How	Frequency	Time	Demands	Demand to documentation:	Who/Responsible:	Carried out/Reference:
1	Timber Material Delivery Control	Visual control for approval	1	On Receiving	No damage on timber, Same amount as ordered, Approved stamps	Delivery note(s)	Storage Keeper	
2	Other Material Delivery Control	Visual Check (incl Measuring)	1	On Receiving	No damage, Same amount as ordered	Delivery note(s), Journal	Storage Keeper	
3	Wooden Quality Control	Visual Check (incl Measuring)	1	After Cutting	Correct dimensions, Check quality	Journal	Production Manager	
4	Framework Control	Visual Check (incl Measuring)	1	After Assembly	Correct dimensions, Correct assembly, No damage, Correct placement of screws and amount of screws	Journal, Photo documentation	Production Manager	
5	DPM Quality Control	Visual Check	1	After Assembly	Taped and tight placement, No damage, DPM taped correctly	Journal, Photo documentation	Production Manager	
6	Non-Load Bearing Frame Control	Visual Check (incl Measuring)	1	After Stapling	Correct dimensions, No damages, Correct placement and amount of Screws	Journal, Photo documentation	Production Manager	
7	Insulation Quality Control	Visual Check (incl Measuring)	1	Before Placing	Correct dimension, Check quality, No damage	Journal	Production Manager	
8	45 mm Insulation Fill Control	Visual Check	1	After Placing	Correct placement, No gap, No damage	Journal, Photo documentation	Production Manager	
9	OSB Board Quality Control	Visual Check (incl Measuring)	1	Before Assembly	Correct dimension, Check quality, No damage	Journal	Production Manager	
10	OSB Board Control Mounting	Visual Check	1	After Assembly	Correct placement, No damage, Correct placement and amount of screws	Journal, Photo documentation	Production Manager	
11	Element Control	Visual Check (incl Measuring)	1	Before Turning Element	Correct dimensions, No damages, Correct placement of elements (in overall construction)	Journal, Photo documentation	Production Manager	
12	Element Control	Visual Check (incl Measuring)	1	After Turning Element	Correct dimensions, No damages, Correct placement of elements (in overall construction)	Journal, Photo documentation	Production Manager	
13	Insulation Quality Control	Visual Check (incl Measuring)	1	Before Assembly	Correct dimension, Check quality, No damage	Journal	Production Manager	
14	200 mm Insulation Fill Control	Visual Check	1	After placing	Correct placement, No gap, No damage	Journal, Photo documentation	Production Manager	
15	Windbreaker (Cembrit) Quality Control	Visual Check (incl Measuring)	1	Before Assembly	Correct dimension, Check quality, No damage	Journal	Production Manager	
16	Windbreaker (Cembrit) Control	Visual Check	1	After Assembly	Correct placement, No damage, Correct placement and amount of screws	Journal, Photo documentation	Production Manager	
17	Distance Strip Quality Control	Visual Check (incl Measuring)	1	Before Assembly	Correct dimensions, Check quality, No Damage	Journal	Production Manager	
18	Distance Strip Control	Visual Check	1	After Assembly	Correct placement, No damage, Correct placement and amount of screws	Journal, Photo documentation	Production Manager	
19	Horizontal Batten Quality Control	Visual Check (incl Measuring)	1	Before Assembly	Correct dimensions, Check quality, No Damage	Journal	Production Manager	
20	Horizontal Batten Control	Visual Check	1	After Assembly	Correct placement, No damage, Correct placement and amount of screws	Journal, Photo documentation	Production Manager	
21	Element Control	Visual Check (incl Measuring)	1	Before Packing	Correct Dimensions (Overall and Opening), No damage	Journal, Photo documentation	Production Manager	
22	Element Control	Visual Check	1	After Packing	Packing Done Correctly	Journal, Photo documentation	Production Manager	
23	Element Control	Visual Check	1	Before Transport	Loading safety check, Quality check	Journal, Photo documentation	Production Manager	

Case: MULTI-PURPOSE SPORTS HALL	No. of case:	Date: 23/11/23 Rev:	Page 3 of 45
Location:	Contract/building component: WOOD PARAPET		

Operation No.:	Subject	Method/How	Frequency	Time	Demands	Demand to documentation:	Who/Responsible:	Carried out/Reference:
1	Timber Material Delivery Control	Visual Check	1	On Receiving	No damage on timber, Same amount as ordered, Approved stamps	Delivery note(s)	Storage Keeper	
2	Other Material Delivery Control	Visual Check	1	On Receiving	No damage, Same amount as ordered	Delivery note(s), Journal	Storage Keeper	
3	Wooden Quality Control	Visual Check (incl Measuring)	1	After Cutting	Correct dimensions, Check quality	Journal	Production Manager	
4	Framework Control	Visual Check (incl Measuring)	1	After Assembly	Correct dimensions, Correct assembly, No damage, Correct placement of screws and amount of screws	Journal, Photo documentation	Production Manager	
5	Insulation Quality Control	Visual Check (incl Measuring)	1	Before Placing	Correct dimension, Check quality, No damage	Journal	Production Manager	
6	95 mm Insulation Fill Control	Visual Check	1	After Placing	Correct placement, No gap, No damage	Journal, Photo documentation	Production Manager	
7	OSB Board Quality Control	Visual Check (incl Measuring)	1	Before Assembly	Correct dimension, Check quality, No damage	Journal	Production Manager	
8	OSB Board Control	Visual Check	1	After Assembly	Correct placement, No damage, Correct placement and amount of screws	Journal, Photo documentation	Production Manager	
9	Element Control	Visual Check (incl Measuring)	1	Before Turning Element	Correct dimensions, No damages, Correct placement of elements (in overall construction)	Journal, Photo documentation	Production Manager	
10	Element Control	Visual Check (incl Measuring)	1	After Turning Element	Correct dimensions, No damages, Correct placement of elements (in overall construction)	Journal, Photo documentation	Production Manager	
11	Windbreaker (Cembrit) Quality Control	Visual Check (incl Measuring)	1	Before Assembly	Correct dimension, Check quality, No damage	Journal	Production Manager	
12	Windbreaker (Cembrit) Control	Visual Check	1	After Assembly	Correct placement, No damage, Correct placement and amount of screws	Journal, Photo documentation	Production Manager	
13	Distance Strip Quality Control	Visual Check (incl Measuring)	1	Before Assembly	Correct dimensions, Check quality, No Damage	Journal	Production Manager	
14	Distance Strip Control	Visual Check	1	After Assembly	Correct placement, No damage, Correct placement and amount of screws	Journal, Photo documentation	Production Manager	
15	Horizontal Batten Quality Control	Visual Check (incl Measuring)	1	Before Assembly	Correct dimensions, Check quality, No Damage	Journal	Production Manager	
16	Horizontal Batten Control	Visual Check	1	After Assembly	Correct placement, No damage, Correct placement and amount of screws	Journal, Photo documentation	Production Manager	
18	Element Control	Visual Check (incl Measuring)	1	Before Packing	Correct Dimensions (Overall and Opening), No damage	Journal, Photo documentation	Production Manager	
19	Element Control	Visual Check	1	After Packing	Packing Done Correctly	Journal, Photo documentation	Production Manager	
20	Element Control	Visual Check	1	Before Delivery	Loading safety check, Quality check	Journal, Photo documentation	Production Manager	

SCREWS SPECIFICATIONS

LOAD BEARING FRAME:

NKT spun+ climate screw 6.0*100 mm

- Type: SPUN+ climate screw
- Length: 100 mm
- Thread length: 80 mm
- Thickness: 6.0 mm
- Head: Submerged head
- Indoor and outdoor use
- Notch: TX20
- Tip: High performance tip
- Application: Load bearing structures



NKT spun+ climate screw 6.0*180 mm

- Type: SPUN+ climate screw
- Length: 180 mm
- Thread length: 150 mm
- Thickness: 6.0 mm
- Head: Submerged head
- Indoor and outdoor use
- Notch: TX20
- Tip: High performance tip
- Application: Load bearing structures



DPM:

TJEP - PG 50 Staples



NON - LOAD BEARING FRAME:

NKT spun+ universal screw 5.0*90 mm

- Type: SPUN+ universal screw
- Length: 90 mm
- Thread length: 70 mm
- Thickness: 5.0 mm
- Head: Submerged head
- Indoor use
- Notch: TX20
- Tip: High performance tip
- Application: Universal, wood, plastic etc.
- Material: Stainless steel



OSB BOARD:

NKT spun+ universal screw 4.0*30 mm

- Type: SPUN+ universal screw
- Length: 30 mm
- Thread length: 27.5 mm
- Thickness: 4.0 mm
- Head: Submerged head
- Indoor use
- Notch: TX20
- Tip: High performance tip
- Application: Universal, wood, plastic etc.
- Material: Stainless steel



GYPSUM BOARD:

NKT spun+ universal screw 4.0*40 mm

- Type: SPUN+ universal screw
- Length: 40 mm
- Thread length: 35 mm
- Thickness: 4.0 mm
- Head: Submerged head
- Indoor use
- Notch: TX20
- Tip: High performance tip
- Application: Universal, wood, plastic etc.
- Material: Stainless steel



WINDBREAKER (FIBER - CEMENT BOARD):

NKT spun+ climate screw 4.0*30 mm

- Type: SPUN+ climate screw
- Length: 30 mm
- Thread length: 27.5 mm
- Thickness: 4 mm
- Head: Submerged head
- Indoor and outdoor use
- Notch: TX20
- Tip: High performance tip
- Application: Wood, Particleboard etc



DISTANCE STRIPS:

NKT spun+ climate screw 4.0*40 mm

- Type: SPUN+ climate screw
- Length: 40 mm
- Thread length: 35 mm
- Thickness: 4 mm
- Head: Submerged head
- Indoor and outdoor use
- Notch: TX20
- Tip: High performance tip
- Application: Wood, Particleboard etc



HORIZONTAL BATTENS:

NKT spun+ climate screw 6.0*100 mm

- Type: SPUN+ climate screw
- Length: 100 mm
- Thread length: 80 mm
- Thickness: 6 mm
- Head: Submerged head
- Indoor and outdoor use
- Notch: TX20
- Tip: High performance tip
- Application: Wood, Particleboard etc



WOODEN CLADDING:

NKT spun+ climate screw 4.0*40 mm

- Type: SPUN+ climate screw
- Length: 40 mm
- Thread length: 35 mm
- Thickness: 4 mm
- Head: Submerged head
- Indoor and outdoor use
- Notch: TX20
- Tip: High performance tip
- Application: Wood, Particleboard etc

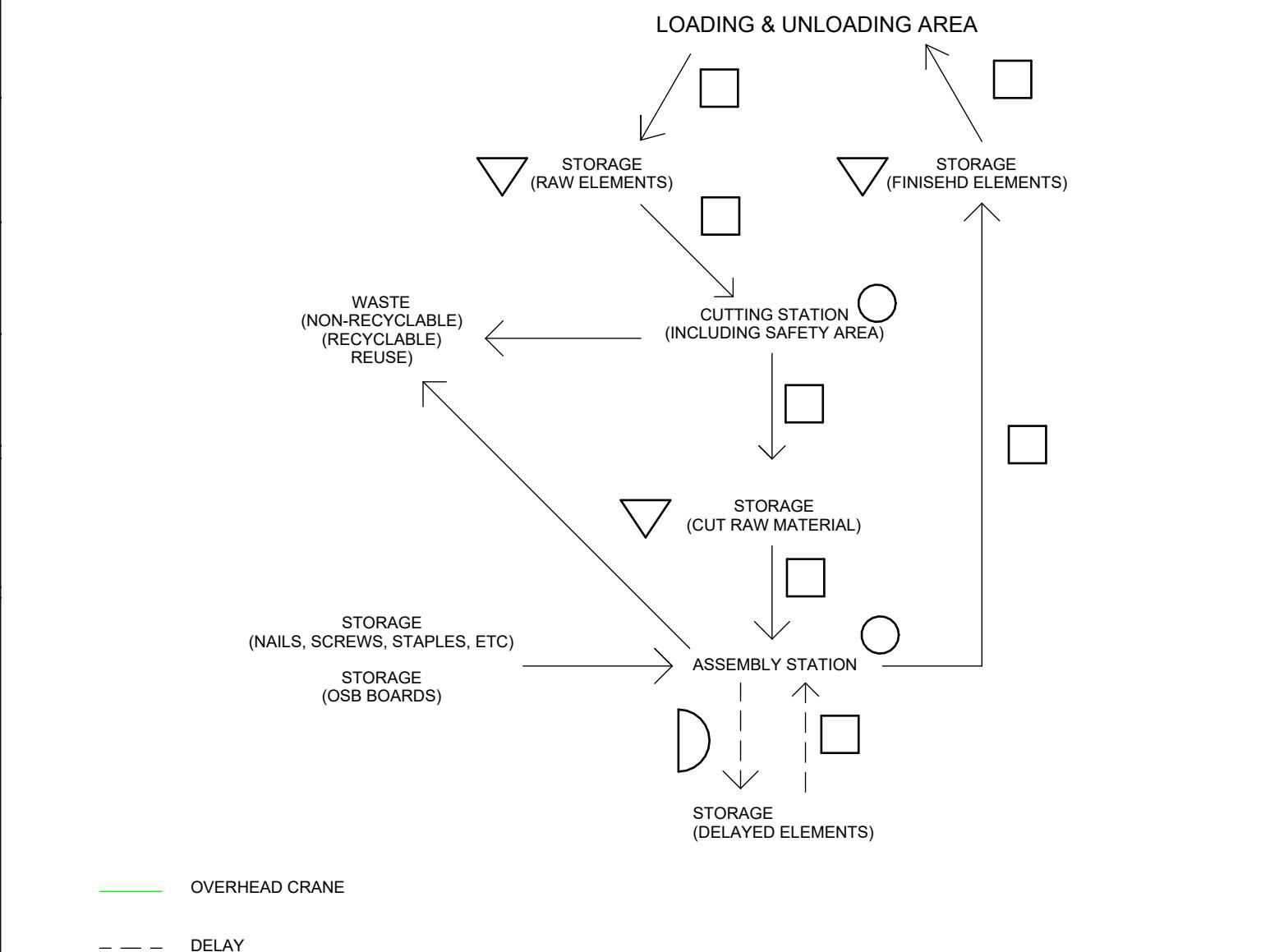
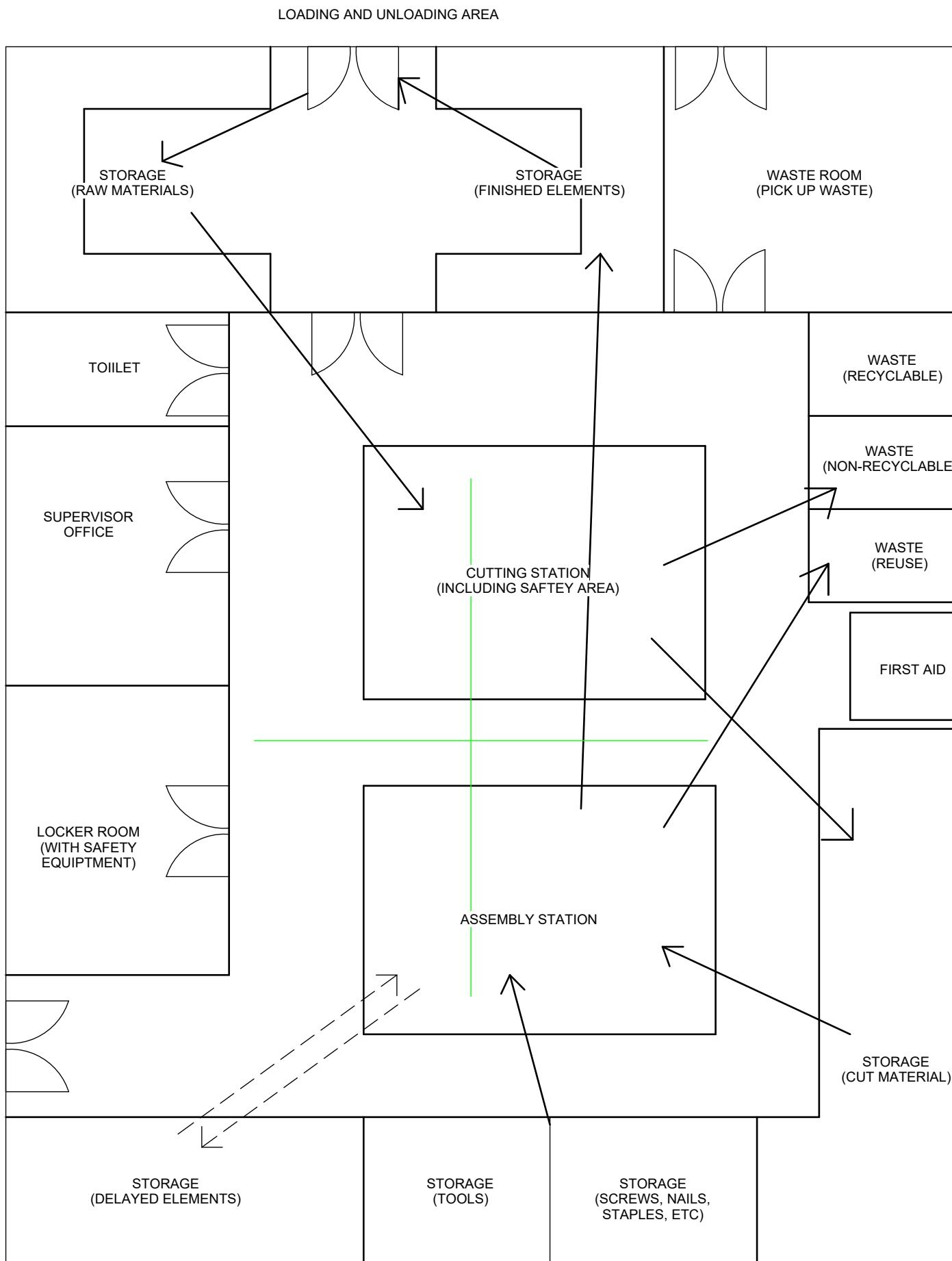


REDDINGTON

VIA >

PROJECT: Multi purpose sports hall	DATE: 01/12/2023	Page 04
SUBJECT: Screws specifications		
DRAWN BY: Rahul Choudhary	SCALE:	

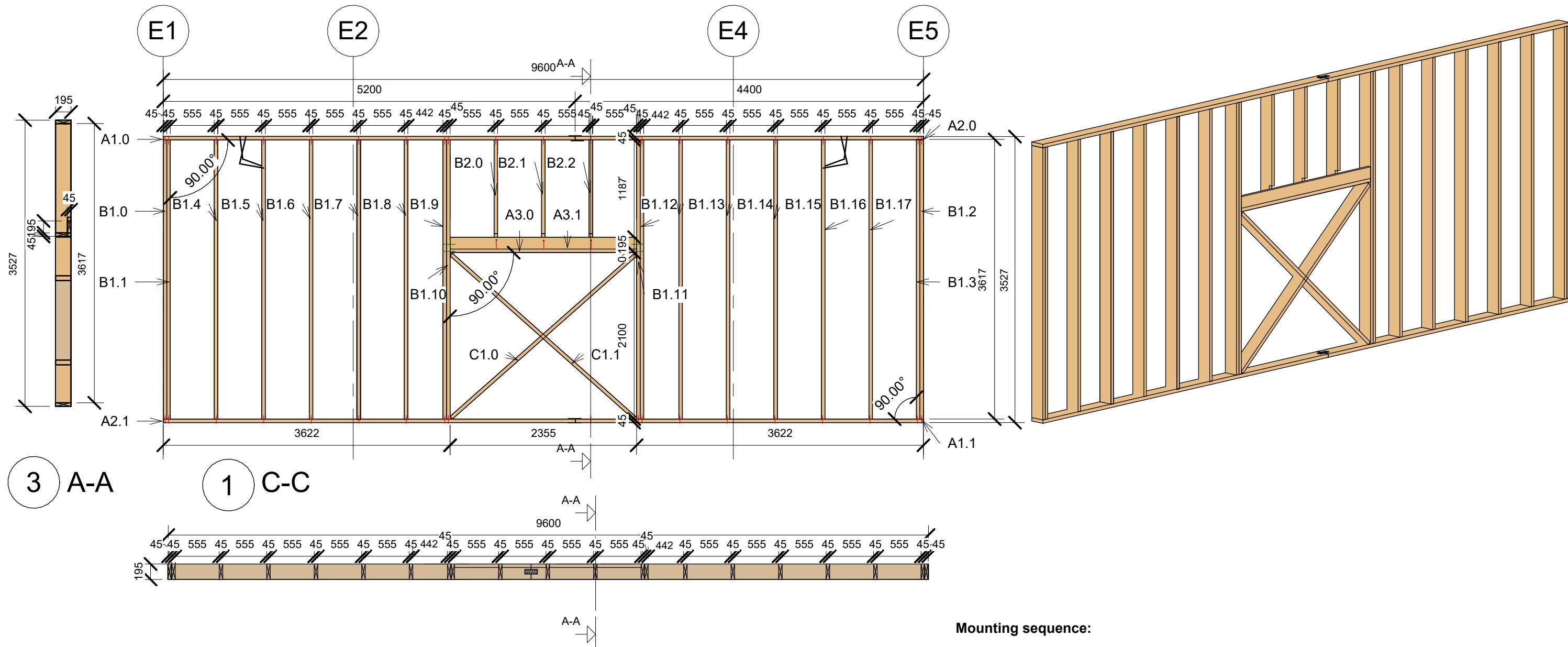
FACTORY LAYOUT



PROJECT: Multi purpose sports hall	DATE: 01/12/2023	VIA >
SUBJECT: FACTORY LAYOUT		
DRAWN BY: Abigail Goodman	SCALE: 1 : 5	

LOAD-BEARING WOODEN FRAME 195 x 45 MM - STEP 1

LOAD-BEARING WOODEN FRAME - ELEMENT VISUALISATION



Load bearing wooden frame		
Type	Length	Count
45x195 mm	5200	2
45x195 mm	4400	2
45x195 mm	2355	2
45x195 mm	3617	17
45x195 mm	3100	2
45x195 mm	1427	3

Mounting sequence:

- | | |
|-----------|-----------|
| 1. A1.0 | 17. B1.11 |
| 2. A2.0 | 18. B1.12 |
| 3. B1.0 | 19. B1.13 |
| 4. B1.1 | 20. B1.14 |
| 5. B1.2 | 21. B1.15 |
| 6. B1.3 | 22. B1.16 |
| 7. A1.1 | 23. B1.17 |
| 8. A2.1 | 24. B2.0 |
| 9. A2.2 | 25. B2.1 |
| 10. B1.4 | 26. B2.2 |
| 11. B1.5 | 27. C1.0 |
| 12. B1.6 | 28. C1.1 |
| 13. B1.7 | |
| 14. B1.8 | |
| 15. B1.9 | |
| 16. B1.10 | |

Wall specifications:

1. 12.5mm Gypsum board REI 30
 2. 15mm OSB board
 3. 45x45mm c/c 600mm Batten
 4. 45mm Mineral wool insulation - Glass Wool
 5. 0.2mm DPM
 6. 45x195mm Wooden stud
 7. 195mm Mineral wool insulation - Glass wool
 8. 9mm Wind barrier – Fiber cement
 9. 12mm c/c 600mm Distance strip
 10. 25x45 Batten
 11. 21mm Wooden cladding

PROJECT: Multi purpose sports hall

DATE:01/12/2023

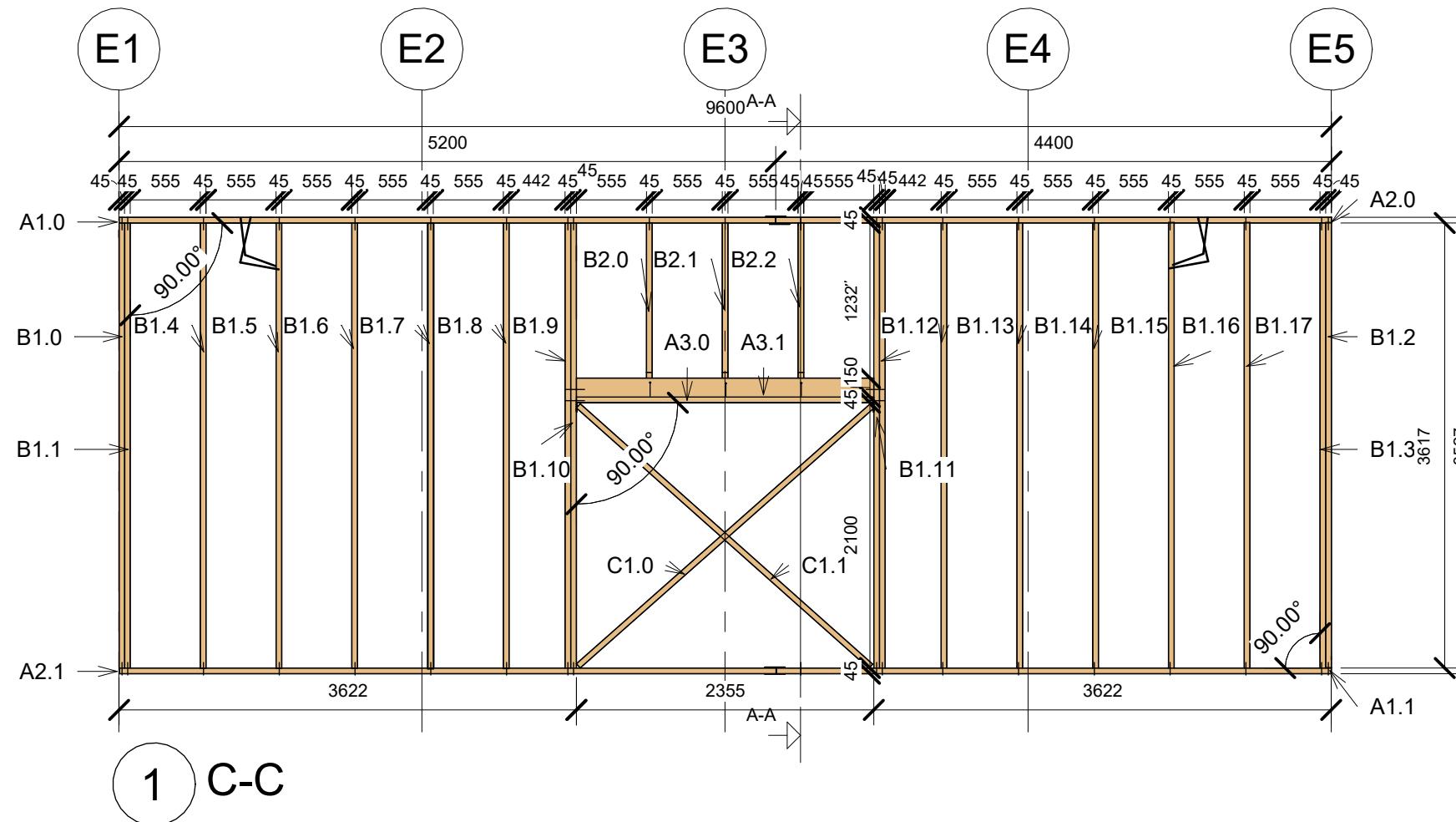
SUBJECT:LOAD-BEARING WOODEN FRAME 195 x 45 MM -

STEP 1

SCALE: 1 : 50

LOAD-BEARING WOODEN FRAME 195 x 45 MM - STEP 1.1

LOAD-BEARING WOODEN FRAME - ASSEMBLY AND INFORMATION



Information:

Manufacturer: DAN-WOOD Sawmill
 Material: Timber
 Quality: C14
 Bending strength: 18Mpa
 Surface: Planned
 Fire resistance: D-s2, d0
 • Rope: Randers 3-Strand Danaflex O02-0140-004B
 • Screws:
 1. NKT spun+ climate screw 6.0*100 mm
 2. NKT spun+ climate screw 6.0*180 mm

Assembly:

Assemble the load-bearing wooden frame in the specified sequence of assembly. Verify the diagonal measurement and the corner's angle, which should both be 90 degrees. Screws are used to secure load bearing frame pieces together.

Installing lifting ropes at equal distances from the element's center of gravity is necessary. Drilling the rope holes at least 400 mm* below the top of the stud will prevent interference with the frame screws and excessive pressure on that connection.

*To be calculated in engineering project.

Timber A1.1 will be cut, where opening is, on the site.

Cutting list:

	2x no waste element A1.0, A1.1
	2x, waste 9.1% A2.0, A2.1
	16x, waste 19.8% B1.0 - B1.16
	1x, waste 9.4% A3.0, A3.1
	1x waste 3% B2.0, B2.1, B2.2
	2x, no waste element C1.0, C1.1

waste: 13.8%

Quality control

Wood frame assembly:	
Used correct studs	<input type="checkbox"/>
Fixing in correct order	<input type="checkbox"/>
Properly fixed	<input type="checkbox"/>
Correct dimensions	<input type="checkbox"/>
No damages on wood	<input type="checkbox"/>
Name:	Date:
Singature:	

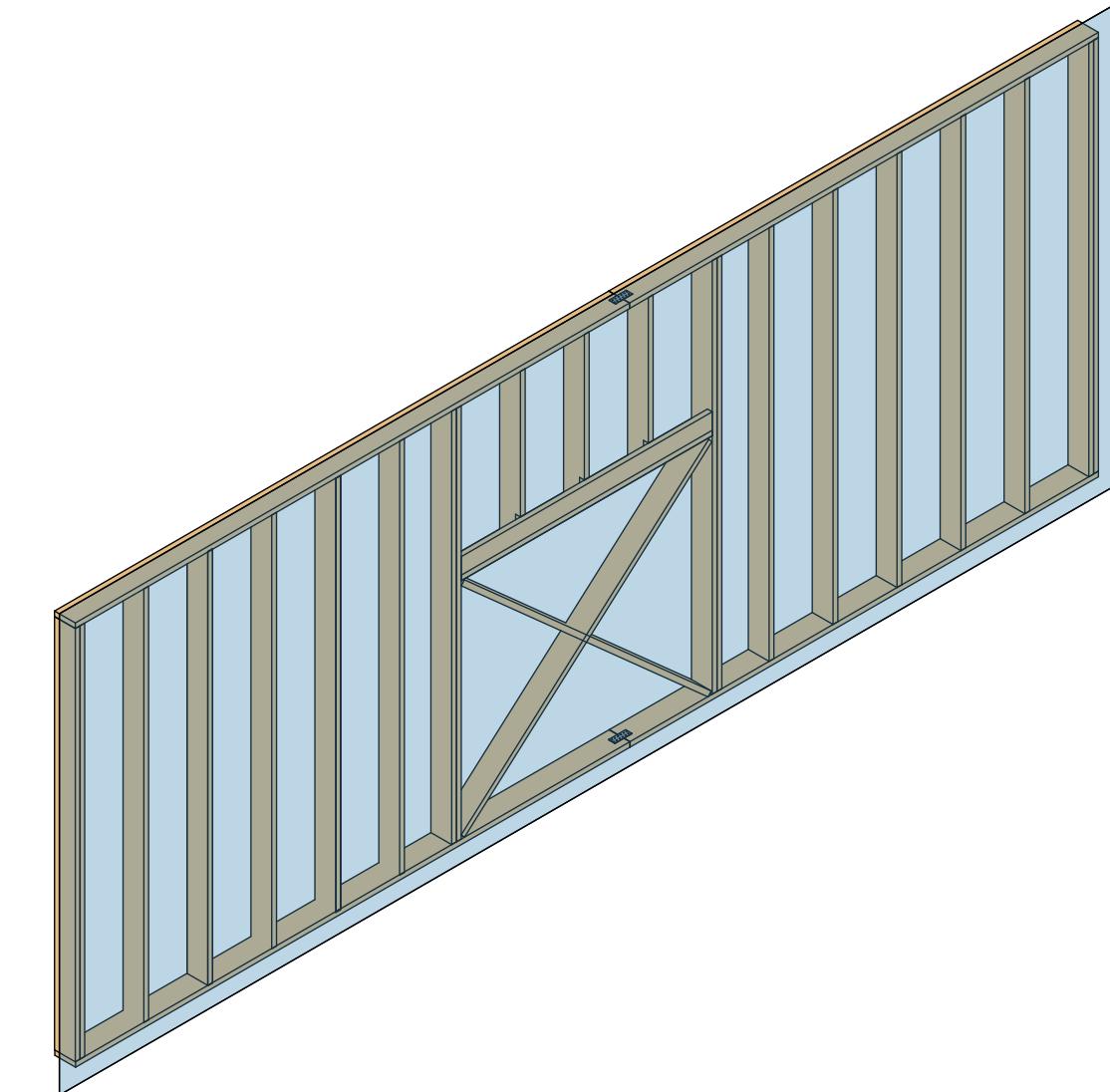
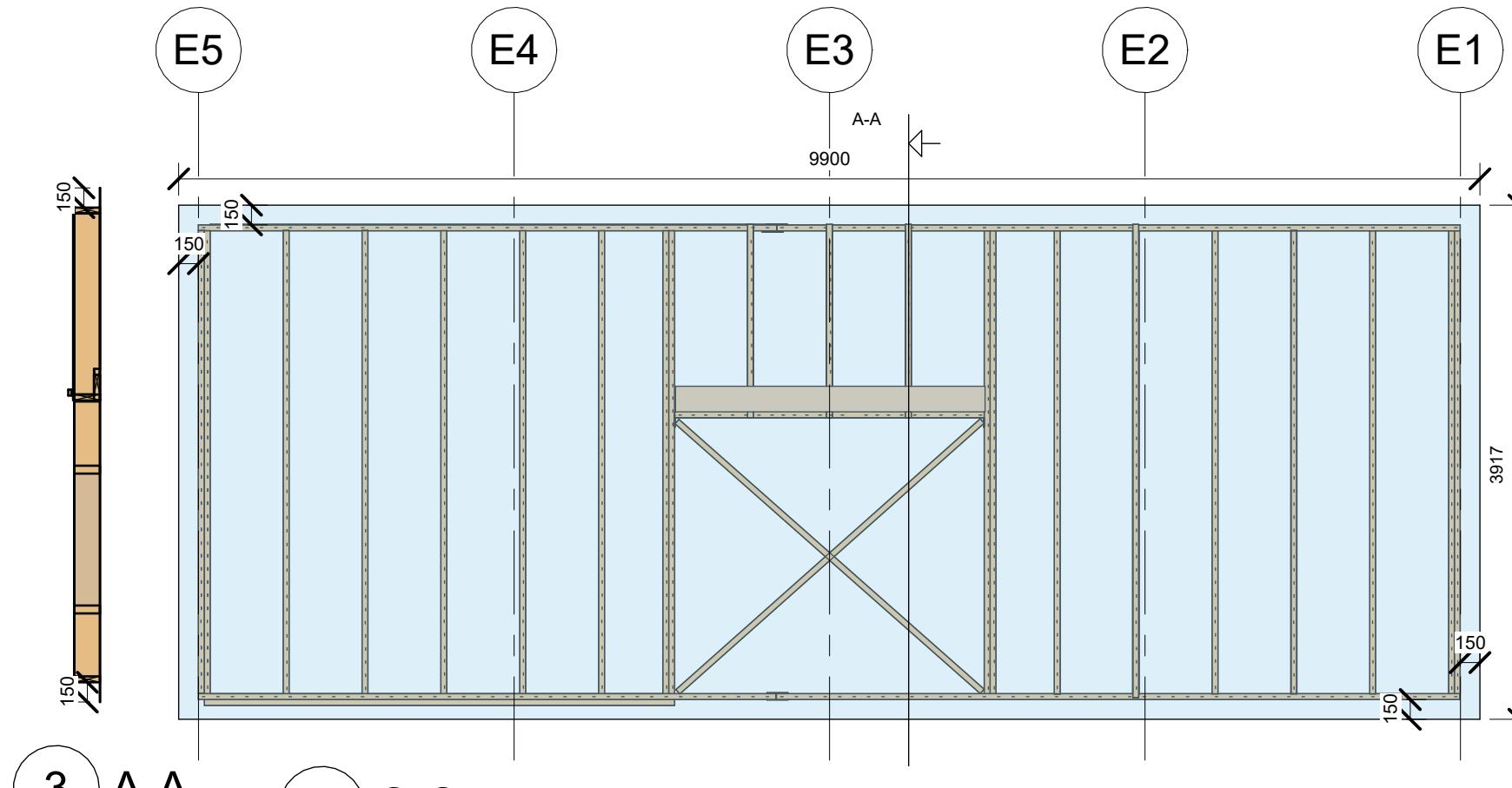


PROJECT: Multi purpose sports hall	DATE: 01/12/2023
SUBJECT: LOAD-BEARING WOODEN FRAME 195 x 45 MM -	
STEP 1.1	SCALE: 1 : 50
DRAWN BY: Abigail Goodman	

REDDINGTON **VIA**

DPM- DAMP PROOF MEMBRANE - STEP 2

DPM - ELEMENT VISUALISATION



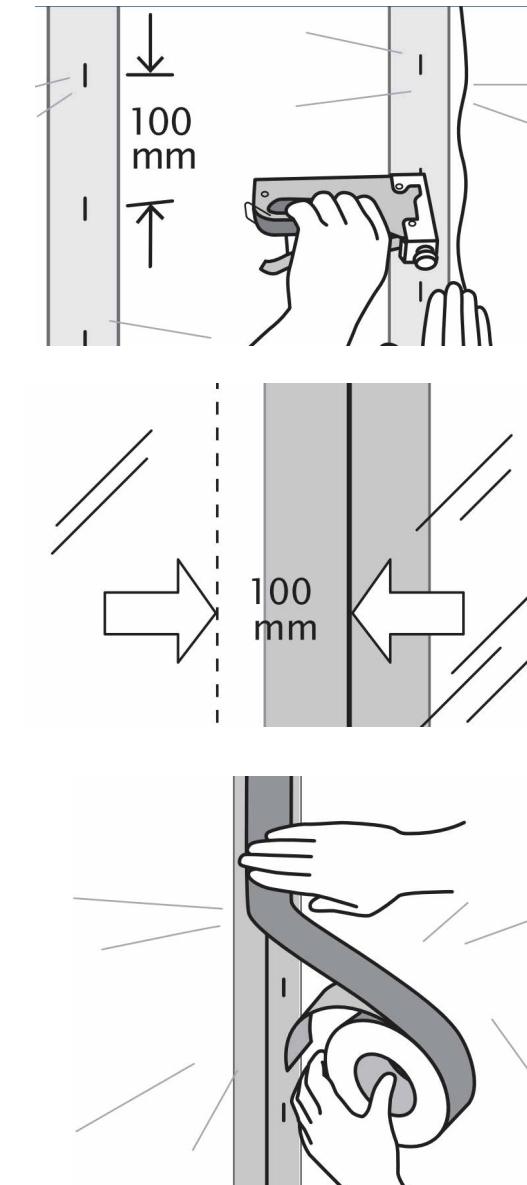
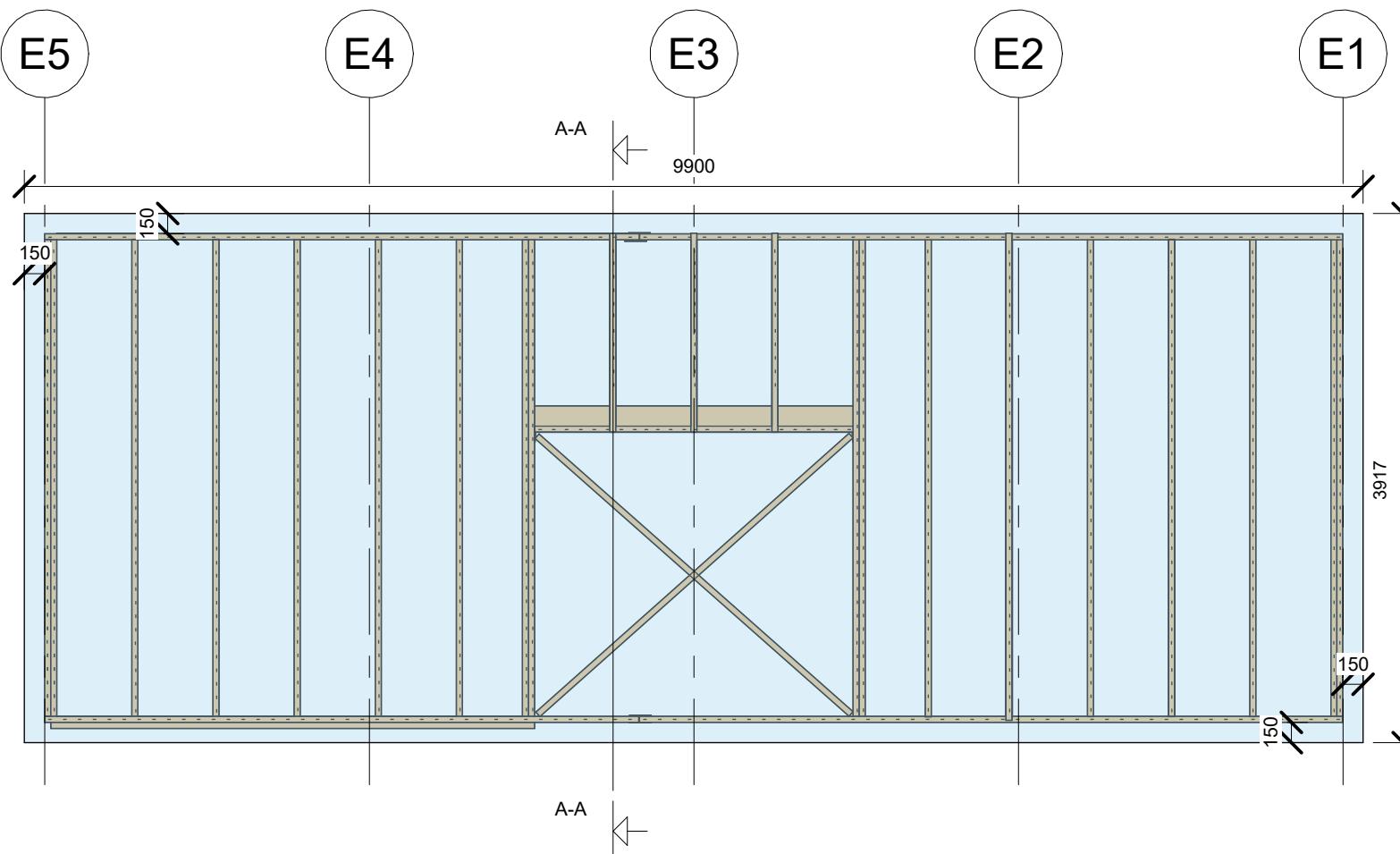
DPM			
Type	Length	Height	Count
DPM	9900	3917	1

Wall specifications:

1. 12.5mm Gypsum board REI 30
2. 15mm OSB board
3. 45x45mm c/c 600mm Batten
4. 45mm Mineral wool insulation - Glass Wool
5. 0.2mm DPM
6. 45x195mm Wooden stud
7. 195mm Mineral wool insulation - Glass wool
8. 9mm Wind barrier – Fiber cement
9. 12mm c/c 600mm Distance strip
10. 25x45 Batten
11. 21mm Wooden cladding

DPM- DAMP PROOF MEMBRANE - STEP 2.1

DPM - ASSEMBLY AND INFORMATION



Information:

Manufacturer: DAFA
Material: PRO-Foil polyethylene
Type: Vapour barrier foil
Dimensions: 4m x 25m x 0,20mm
Fire classification: 7

Staples: TJEP - PG 50

Assembly:

1. Use scissors to cut DPM foil to the desired length. Affix the foil to the wooden frame using staples, placed longitudinally in a straight line with 100 mm spacing. Joints, penetrations and connections must always have a firm underlay.
2. Make joins or connections with at least 100 mm overlap and a firm underlay. It is important that the overlap does not wrinkle or fold.
3. Seal staples and joints on the vapor barrier using DAFA tape. Center the tape over the join and apply pressure to ensure maximum adhesion.
4. After installation, the vapour barrier must be flat and taut. It is important that the vapour barrier is not exposed to excessive tension in corners and at the joints, to avoid unnecessary strain.
5. Once element is complete an opening inside the door frame will be cut out leaving 200mm excess DPM foil to be taped down before the door is installed onsite.

Quality control

DPM Assembly:

- Used correct size of sheet
- Properly fixed
- Correct fixed to the studs
- No damage on foil

Name: _____ Date: _____

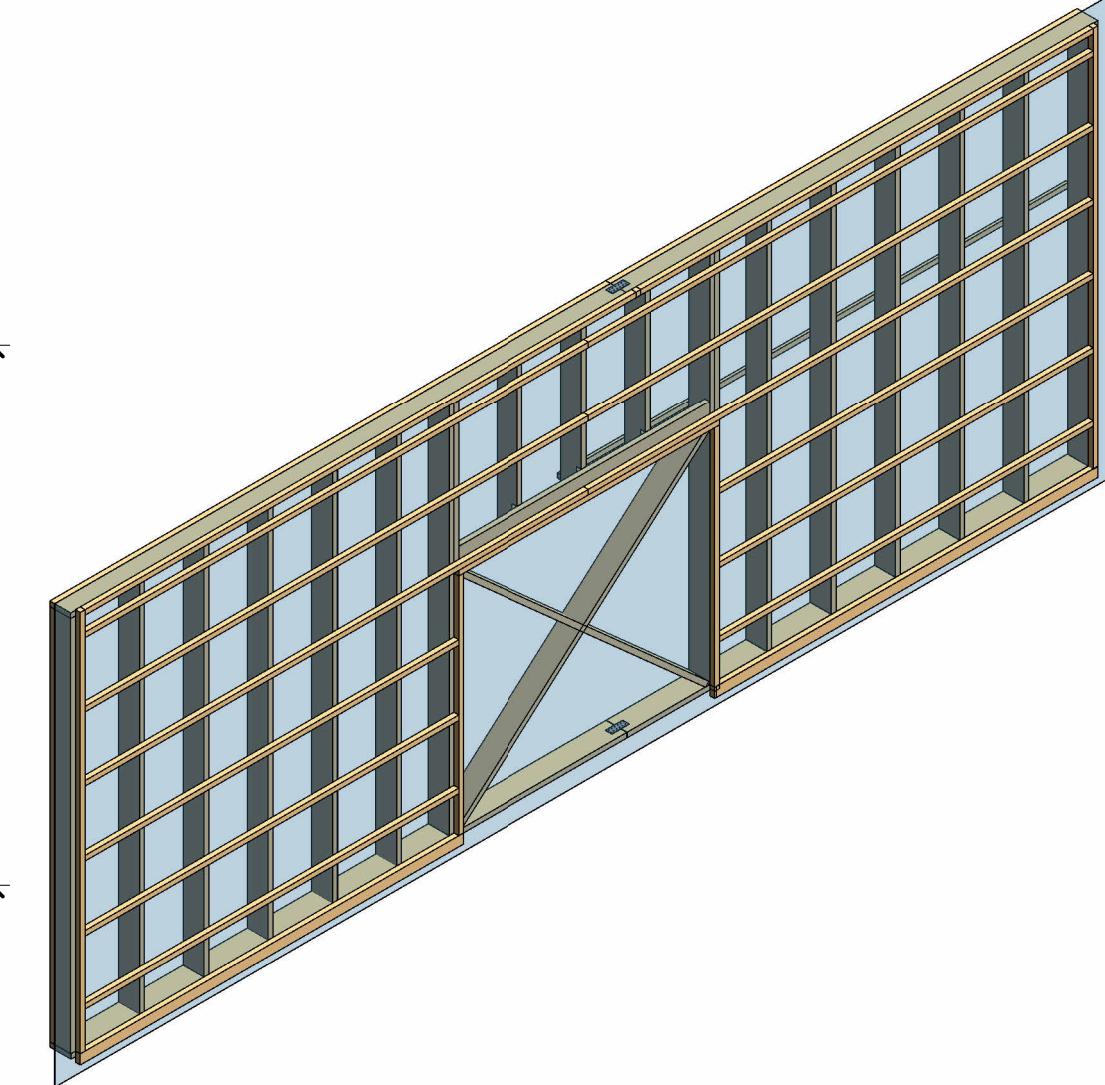
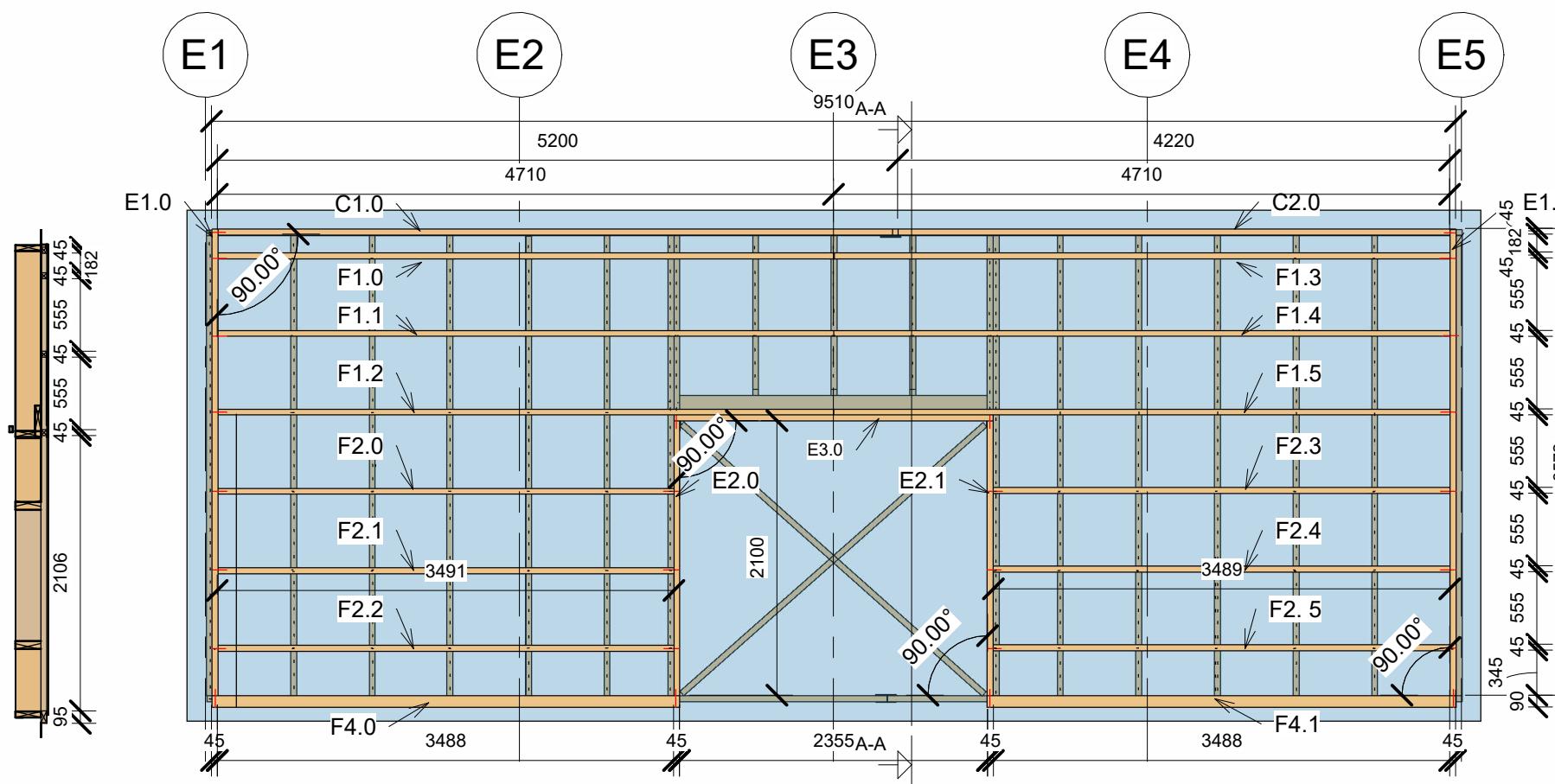
Singature: _____

REDDINGTON **VIA**

PROJECT: Multi purpose sports hall	DATE: 01/12/2023	
SUBJECT:DPM- DAMP PROOF MEMBRANE - STEP 2.1		
DRAWN BY: Abigail Goodman	SCALE: 1 : 50	

NON-LOAD BEARING WOODEN FRAME 45 x 45 MM - STEP 3

NON LOAD-BEARING WOODEN FRAME - ELEMENT VISUALISATION



3 A-A 1 C-C

45

9510

A-A

2 B-B

Non-load bearing wooden frame		
Type	Length	Count
45x45 mm timber	5200	1
45x45 mm timber	4220	1
45x45 mm timber	4710	6
45x45 mm timber	3488	6
45x45 mm timber	2100	2
45x45 mm timber	3572	2
45x45 mm timber	3578	2

Mounting sequence

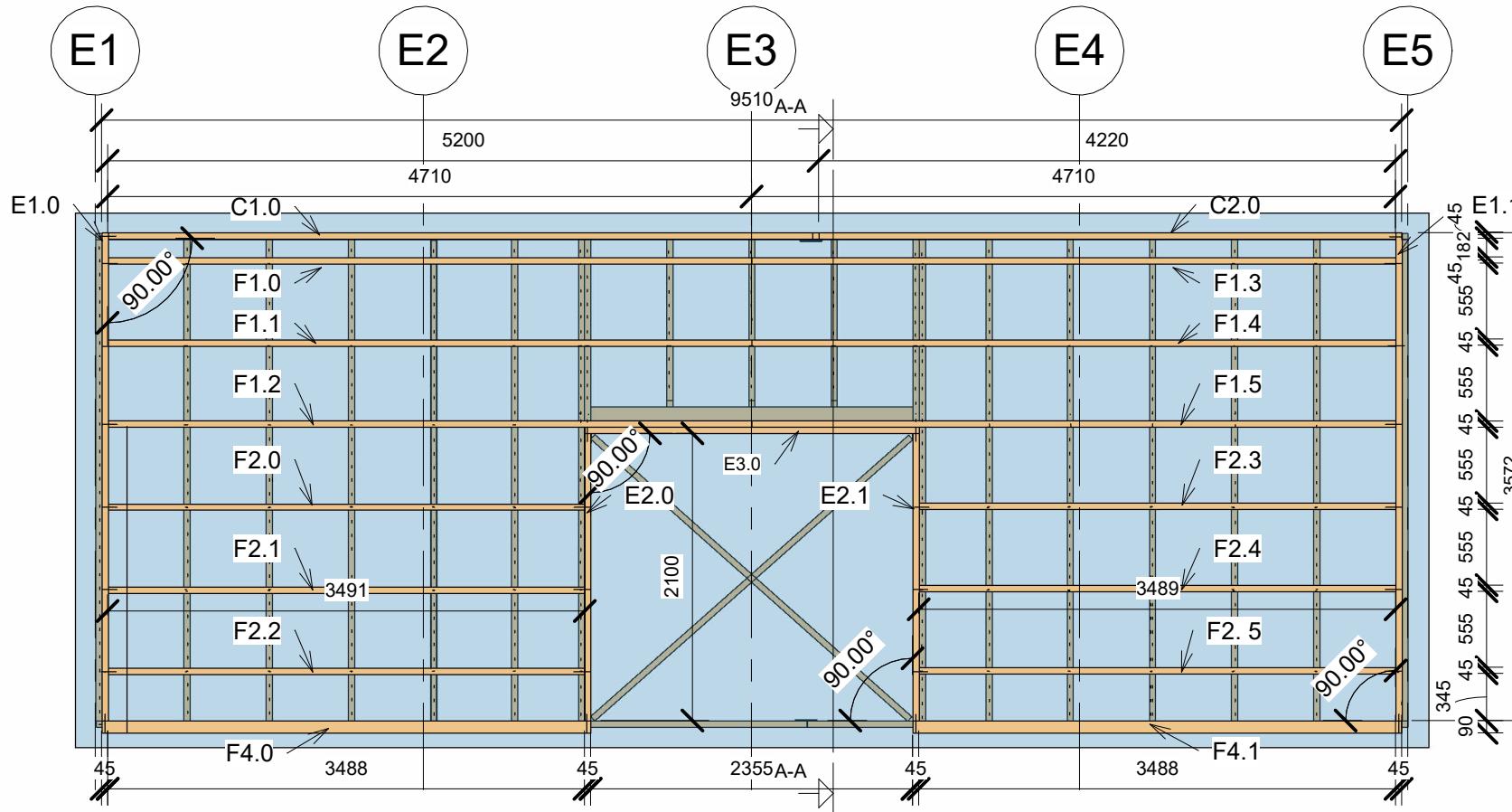
- | | |
|---------|----------|
| 1. C1.0 | 10. E2.1 |
| 2. C2.0 | 11. F3.0 |
| 3. E1.0 | 12. F2.0 |
| 4. E1.1 | 13. F2.1 |
| 5. F1.1 | 14. F2.2 |
| 6. F1.2 | 15. F2.3 |
| 7. F4.0 | 16. F2.4 |
| 8. F4.1 | 17. F2.5 |
| 9. F2.0 | |

Wall specifications:

1. 12.5mm Gypsum board REI 30
 2. 15mm OSB board
 3. 45x45mm c/c 600mm Batten
 4. 45mm Mineral wool insulation - Glass Wool
 5. 0.2mm DPM
 6. 45x195mm Wooden stud
 7. 195mm Mineral wool insulation - Glass wool
 8. 9mm Wind barrier – Fiber cement
 9. 12mm c/c 600mm Distance strip
 10. 25x45 Batten
 11. 21mm Wooden cladding

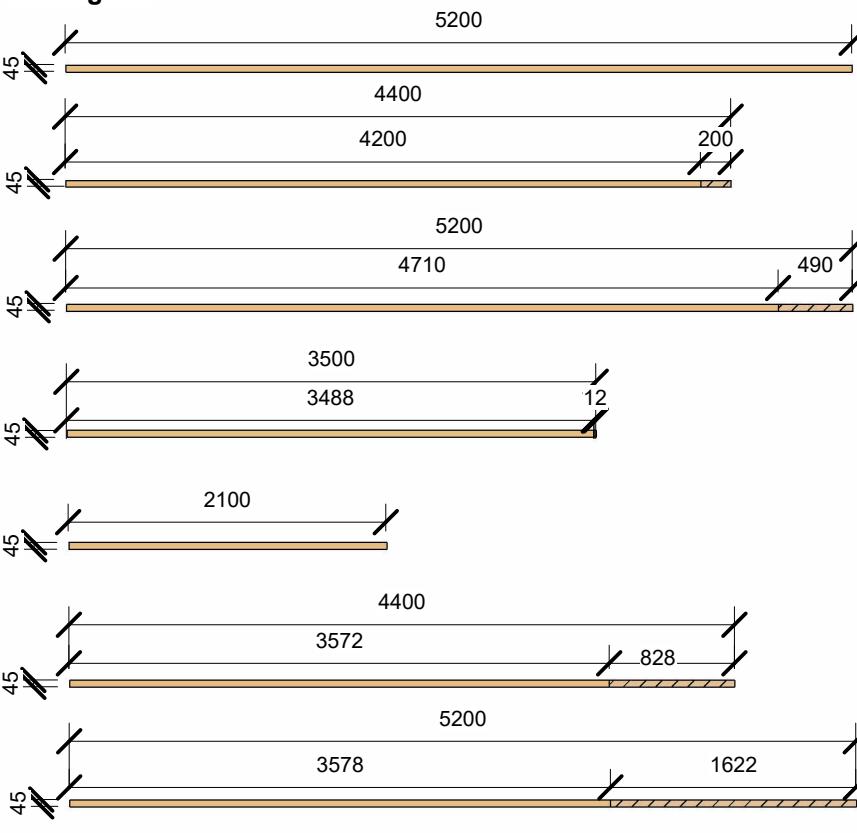
NON-LOAD BEARING WOODEN FRAME 45 x 45 MM - STEP 3.1

NON-LOAD BEARING WOODEN FRAME - ASSEMBLY AND INFORMATION



1 C-C

Cutting list:



waste: 4,8%

Information:

Manufacturer: DAN-WOOD Sawmill
Material: Timber
Quality: C14
Bending strength: 18Mpa
Surface: Planned
Fire resistance: D-s2, d0

- Screws: NKT spun+ universal screw 5.0*90 mm

Assembly:

Assemble the non-load bearing wooden frame in the specified sequence of assembly. Verify the diagonal measurement and the corner's angle, which should both be 90 degrees.

Nails are used to secure non-load bearing frames to load bearing frames.

Nails should be used where the drawing specifies in order to secure the horizontal battens and studs.

Quality control

Wood frame assembly:

- Used correct studs
- Fixing in correct order
- Properly fixed
- Correct dimensions
- No damages on wood



Name: _____ Date: _____

Singature: _____

REDDINGTON

VIA

PROJECT: Multi purpose sports hall

DATE: 01/12/223

SUBJECT: NON-LOAD BEARING WOODEN FRAME 45 x 45 MM

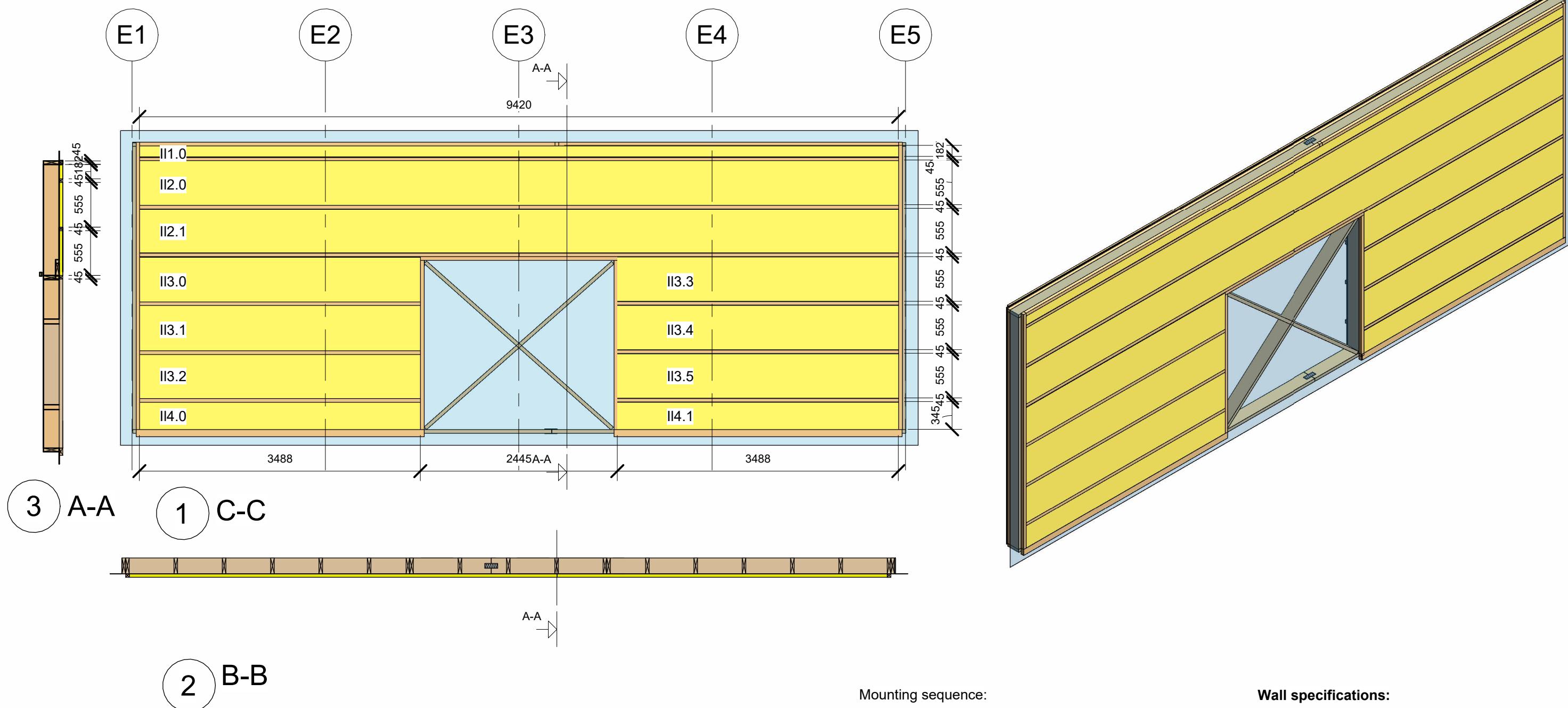
SCALE: 1 : 50

STEP 3.1

DRAWN BY: Abigail Goodman

SOFT INSULATION - GLASS WOOL 45MM- STEP 4

SOFT INSULATION - GLASS WOOL 45MM - ELEMENT VISUALISATION



Glass wool insulation			
Type	Length	Height	Count

45 mm glass wool	9420	570	2
45 mm glass wool	3488	570	6
45 mm glass wool	3488	345	2
45 mm glass wool	9420	182	1

Mounting sequence

1. II1.0
 2. II2.0
 3. II2.1
 4. II3.0
 5. II3.1
 6. II3.2
 7. II3.3
 8. II3.4
 9. II3.5
 10. II4.
 11. II4.

Wall specifications:

1. 12.5mm Gypsum board REI 30
 2. 15mm OSB board
 3. 45x45mm c/c 600mm Batten
 4. 45mm Mineral wool insulation - Glass Wool
 5. 0.2mm DPM
 6. 45x195mm Wooden stud
 7. 195mm Mineral wool insulation - Glass wool
 8. 9mm Wind barrier – Fiber cement
 9. 12mm c/c 600mm Distance strip
 10. 25x45 Batten
 11. 21mm Wooden cladding

PROJECT: Multi purpose sports ha

DATE:01/12/2023

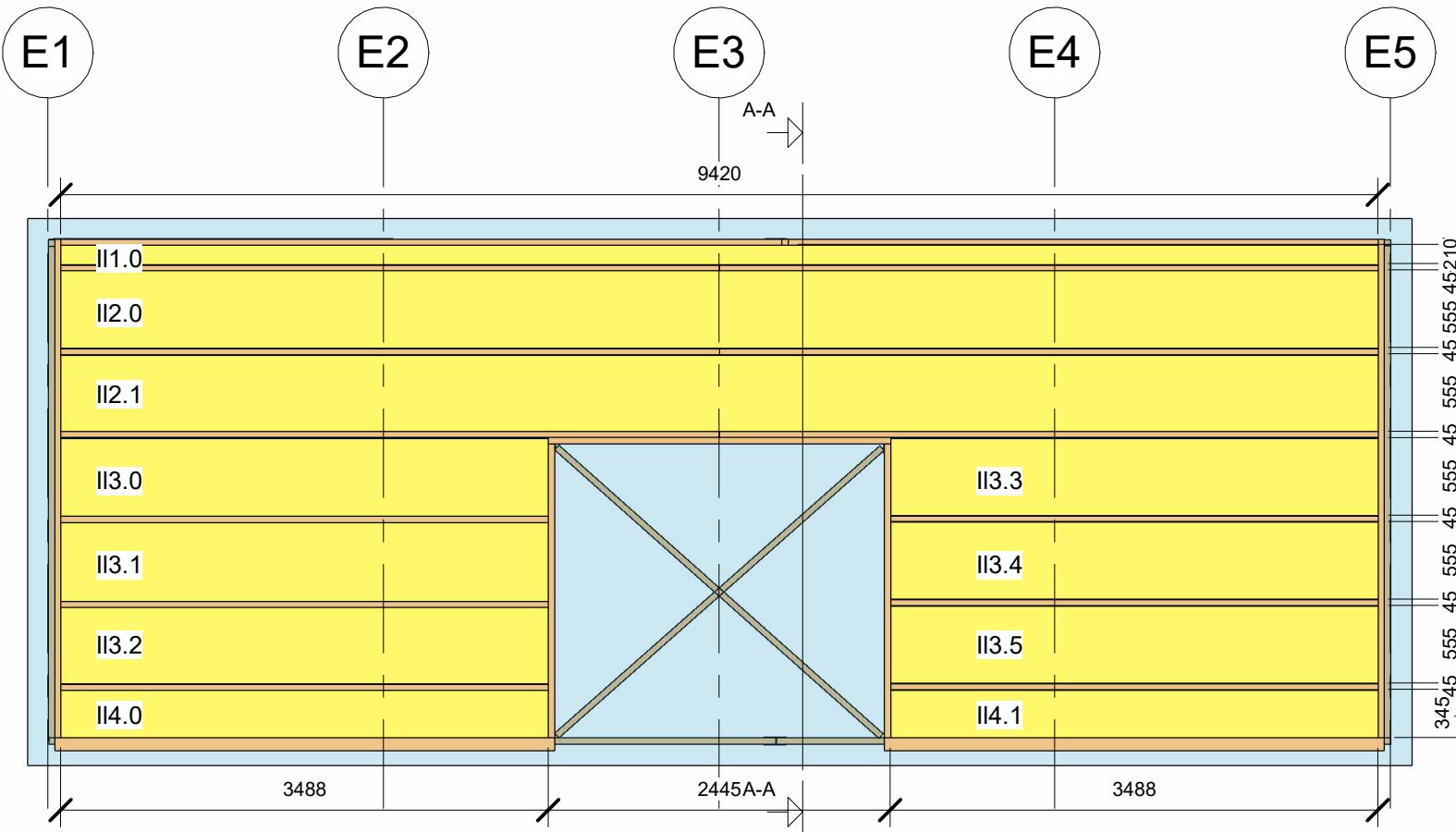
SUBJECT:SOFT INSULATION - GLASS WOOL 45MM- STEP

DRAWN BY: Abigail Goodma

SCALE: 1 : 50

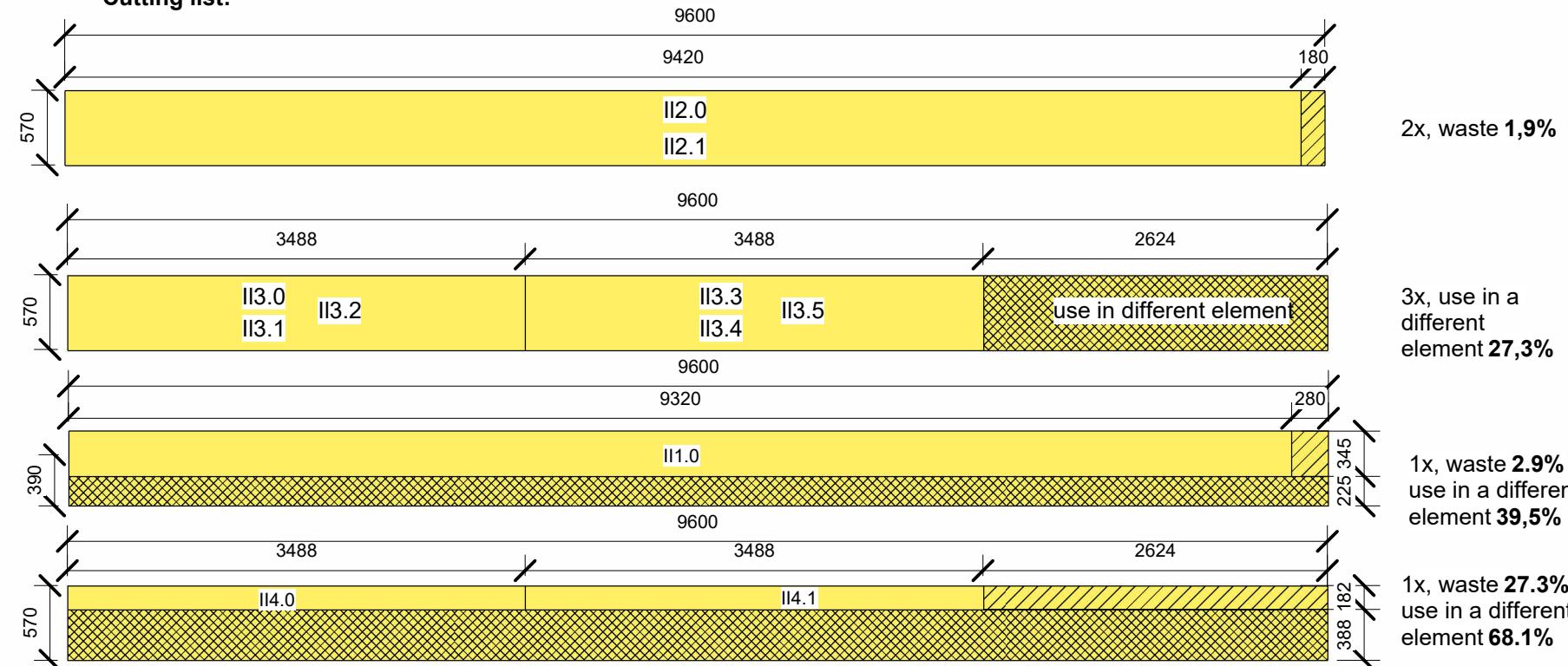
SOFT INSULATION - GLASS WOOL 45MM- STEP 4.1

SOFT INSULATION MINERAL WOOL - ASSEMBLY AND INFORMATION



1 C-C

Cutting list:



waste: 7,9%

use in another element: 20,4%

Information:

Manufacturer: Isover
Material: Glass wool
Type: ISOVER Rolls 34
Thermal conductivity: 0.034 (W/m·K)
Fire class: A2-s1,d0



Assembly:

ISOVER Rolls 34 comes fully prepacked and compressed in the roll.

A single roll measures 45x570x9600mm. Insulation will be squeezed in between the battens, in total 15mm. The insulation roll needs to be cut into pieces. To accomplish this, a specialized insulating knife must be used.

Using the cutting list provided below, cut the insulation. Each piece of mineral wool must be positioned in accordance with the mounting procedure outlined on page 12.

Note:

Recycle

ISOVER Rolls 34 are delivered to landfill as mineral waste at recycling stations. The glass wool can be included circularly and should be sorted as mineral wool. The packaging shall be disposed of in accordance with national rules.



Quality control

Insulation assembly:

- Used correct insulation
- Mounting in correct order
- Properly fixed
- Correct dimensions
- Properly cover all cavities
- No damages on insulation

Name: _____ Date: _____
Signature: _____

REDDINGTON **VIA**

PROJECT: Multi purpose sports hall

DATE: 01/12/2023

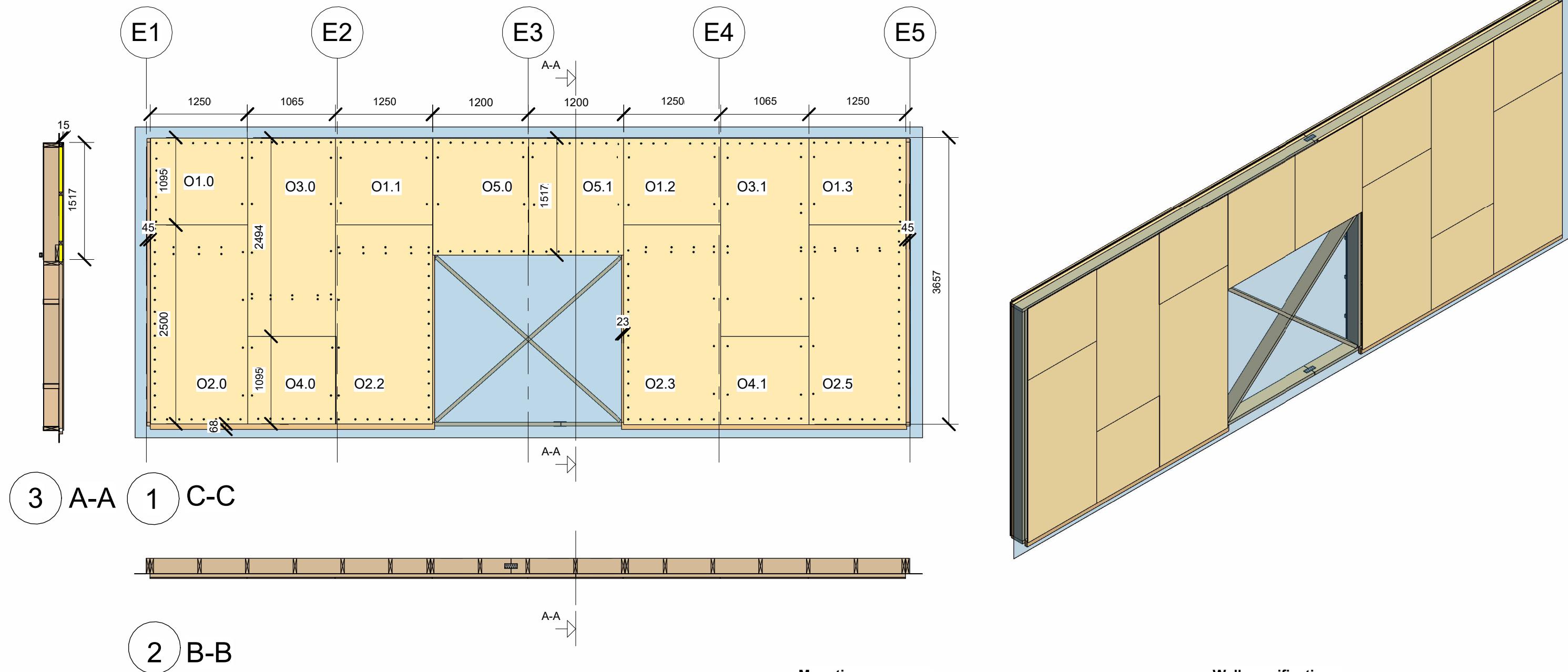
SUBJECT: SOFT INSULATION - GLASS WOOL 45MM- STEP 4.1

DRAWN BY: Abigail Goodman

SCALE: 1 : 50

OSB BOARD 15MM - STEP 5

OSB BOARD - ELEMENT VISUALISATION



OSB Board			
Type	Length	Height	Count
15 mm OSB board	1250	2500	4
15 mm OSB board	1250	1095	4
15 mm OSB board	1095	2500	2
15 mm OSB board	1095	1095	2
15 mm OSB board	1200	1517	2

Mounting sequence:

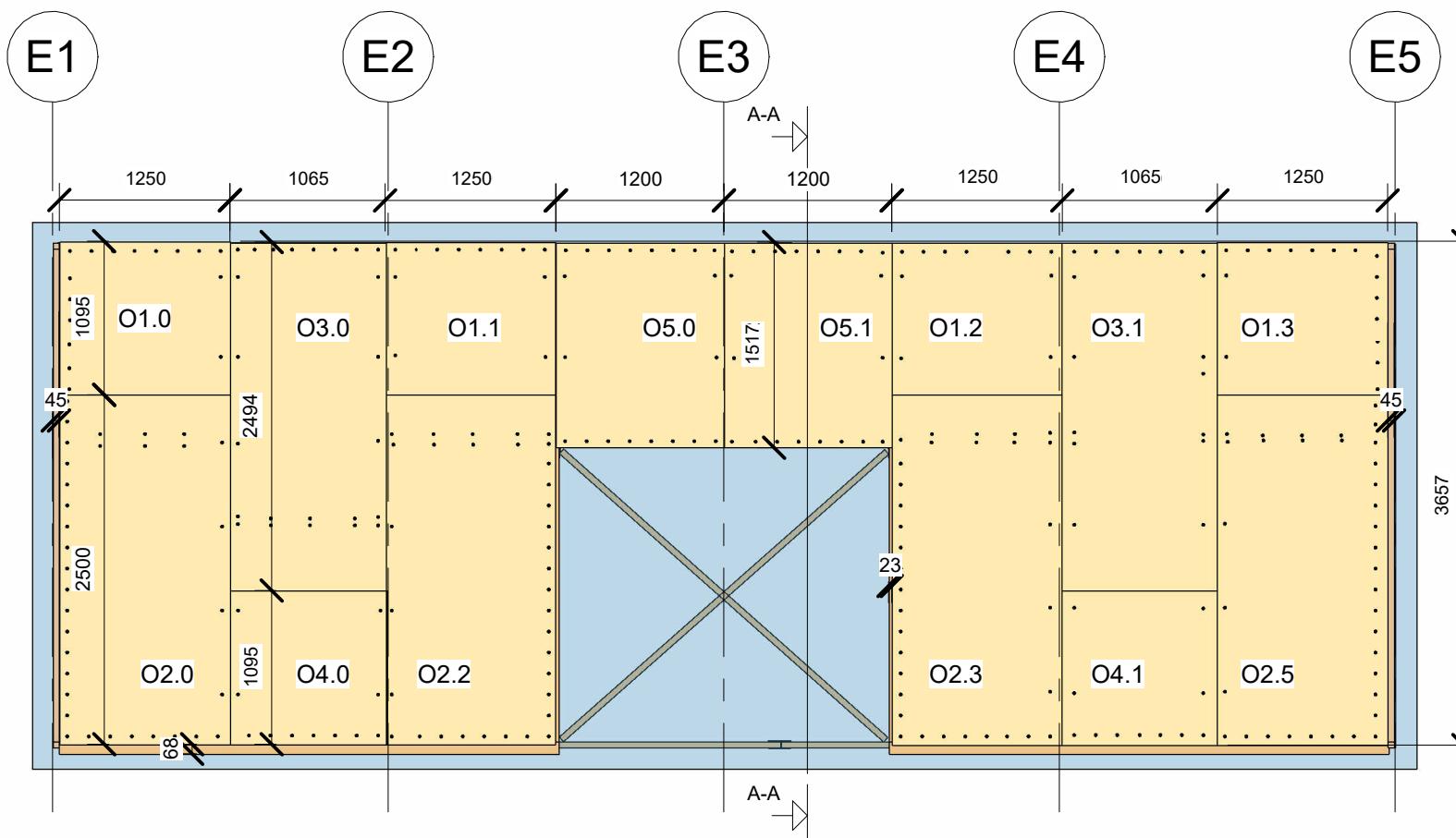
1. O1.0
2. O2.0
3. O3.0
4. O4.0
5. O1.1
6. O2.2
7. O5.0
10. O5.1
11. O1.2
12. O2.3
13. O3.1
14. O4.1
15. O1.3
16. O2.5

Wall specifications:

1. 12.5mm Gypsum board REI 30
2. 15mm OSB board
3. 45x45mm c/c 600mm Batten
4. 45mm Mineral wool insulation - Glass Wool
5. 0.2mm DPM
6. 45x195mm Wooden stud
7. 195mm Mineral wool insulation - Glass wool
8. 9mm Wind barrier – Fiber cement
9. 12mm c/c 600mm Distance strip
10. 25x45 Batten
11. 21mm Wooden cladding

OSB BOARD 15MM - STEP 5.1

OSB BOARD - ASSEMBLY AND INFORMATION



Information:

Manufacturer: NPI
 Material: Soft wood
 Type: OSB-3 Kronospan
 Thermal conductivity: 0.13 (W/m·K)
 Density: 570-620 kg/m³
 Fire class: D-s2,d0
 Moisture class: 2
 Dimensions of board: 2500x1250mm
 Screws: NKT spun+ climate screw 4.0*30 mm

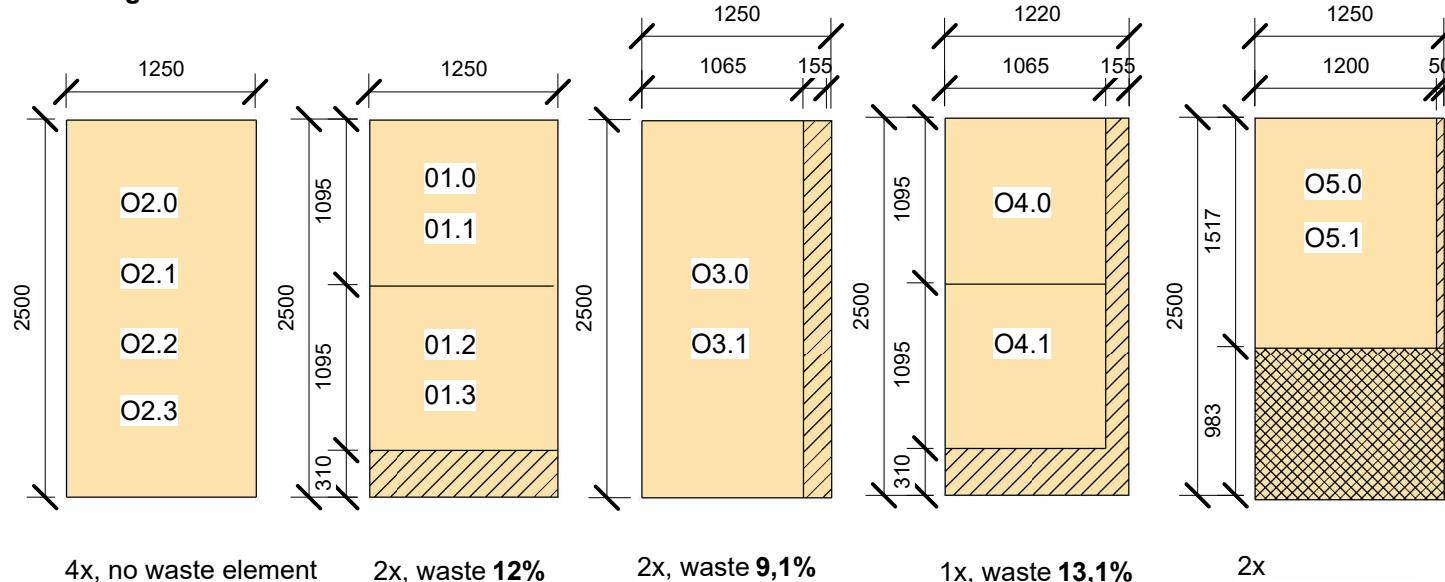
Assembly:

The mounting sequence must be followed when fixing the OSB Board.

The boards have nails 300 mm c/c inside and 150 mm c/c on the edges.

1 C-C

Cutting list:



Quality control	
OSB Board assembly:	
Used correct OSB Board	<input type="checkbox"/>
Mounting in correct order	<input type="checkbox"/>
Properly fixed	<input type="checkbox"/>
Correct dimensions	<input type="checkbox"/>
Properly cover insulation and studs	<input type="checkbox"/>
No damages on boards	<input type="checkbox"/>
Name:	Date:
Signature:	

waste: 3,3%

reuse in another element: 45,6%

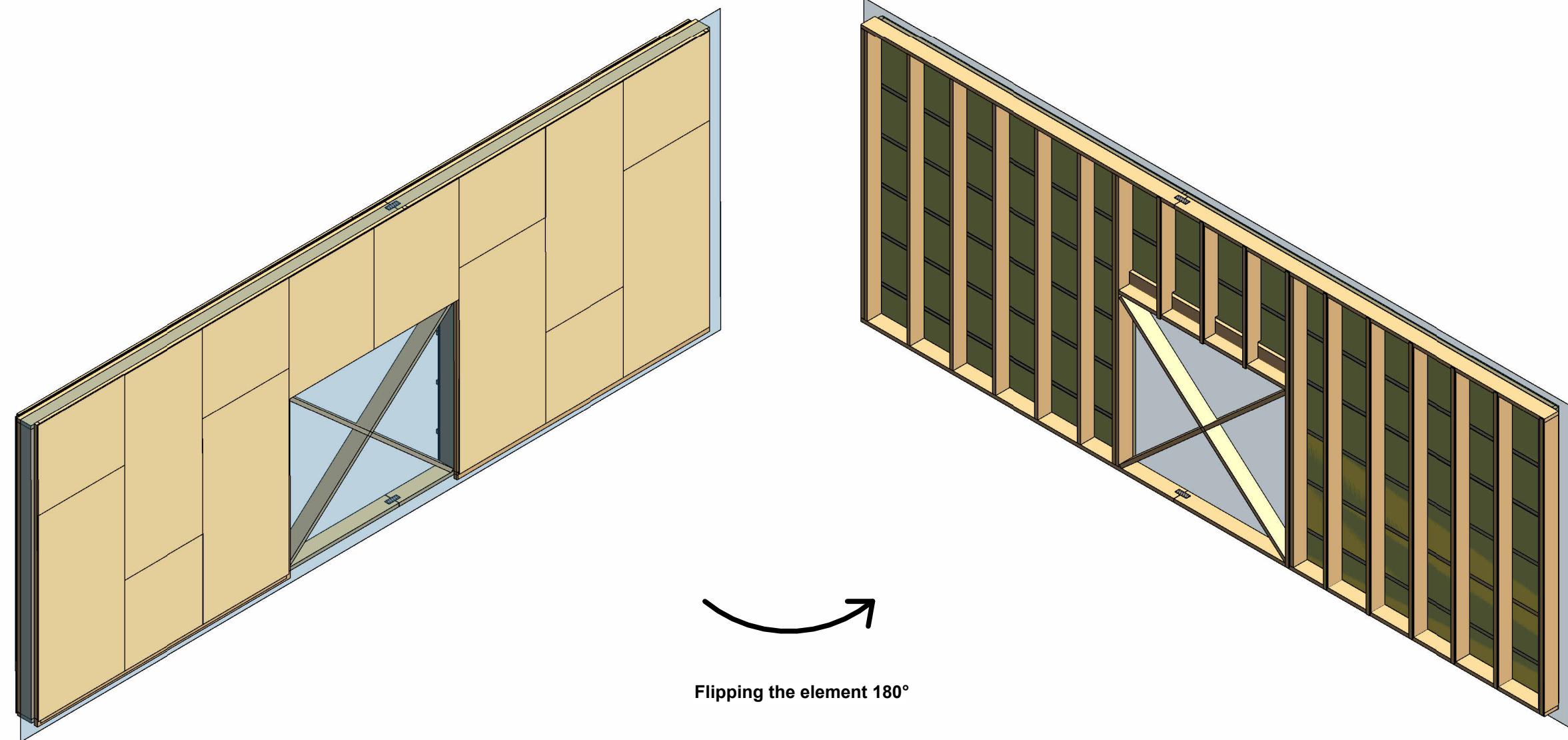
PROJECT: Multi purpose sports hall

SUBJECT: OSB BOARD - STEP 5.1

DRAWN BY: Abigail Goodman

REDDINGTON

VIA >

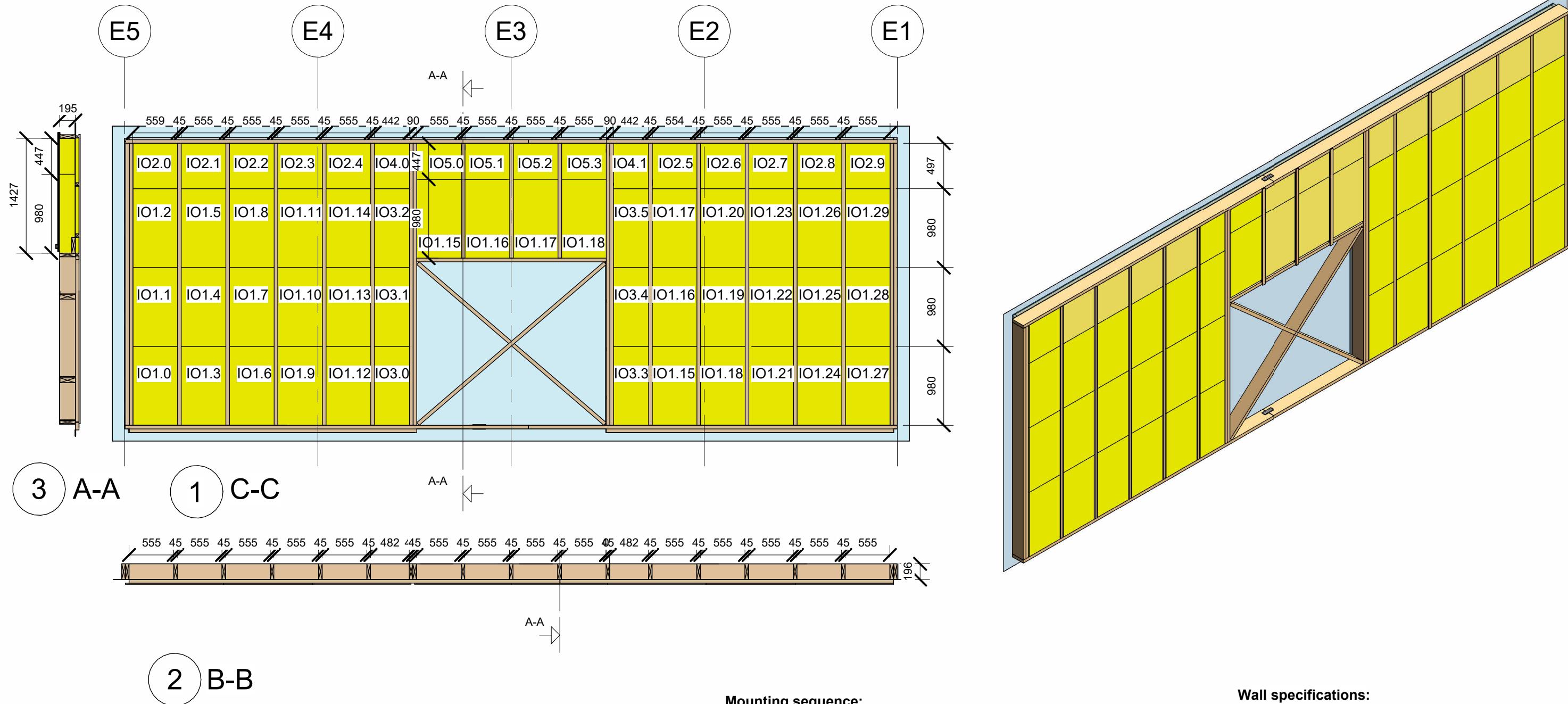


Note: The wall element should be flipped 180 degrees without causing any damage.

PROJECT: Multi purpose sports hall	DATE: 01/12/21	VIA >
SUBJECT: Flipping the element		
DRAWN BY: Author	SCALE:	

SOFT INSULATION - GLASS WOOL 200MM - STEP 7

SOFT INSULATION MINERAL WOOL 200MM - ELEMENT VISUALISATION



195mm Glass wool insulation			
Type	Length	Height	Count
195 mm glass wool insulation	570	980	30
195 mm glass wool insulation	442	980	6
195 mm glass wool insulation	442	497	2
195 mm glass wool insulation	570	497	10
195 mm glass wool insulation	570	447	4

Mounting sequence:

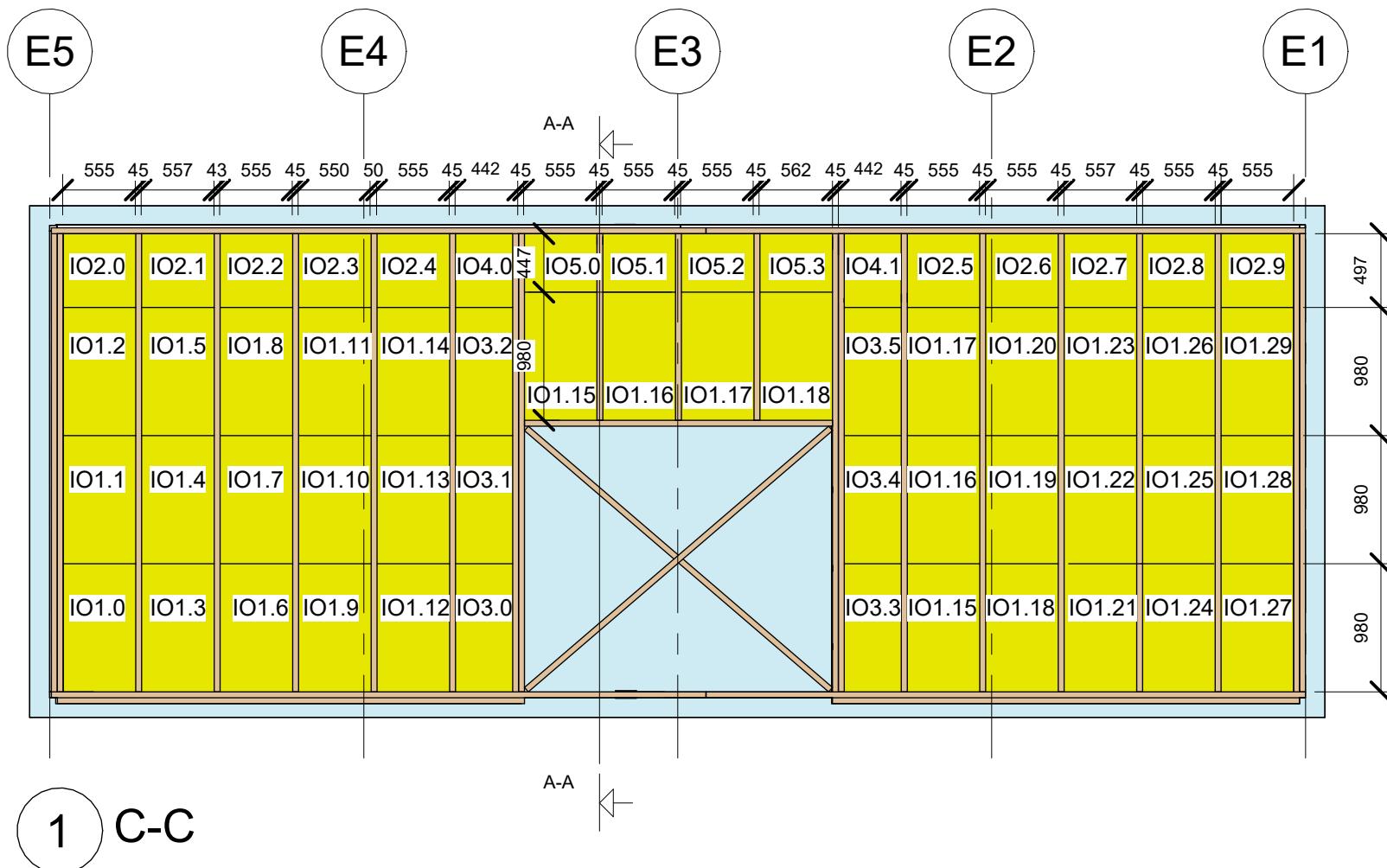
1. IO1.0 16. IO2.3 30. IO1.18 45. IO2.22
2. IO1.1 16. IO1.12 31. IO5.3 45. IO2.23
3. IO1.2 17. IO1.13 32. IO3.3 46. IO2.7
4. IO2.0 18. IO1.14 33. IO3.4 47. IO1.24
5. IO1.3 19. IO2.4 34. IO3.5 48. IO1.25
6. IO1.4 20. IO3.0 35. IO4.1 49. IO1.26
7. IO1.5 21. IO3.1 36. IO1.15 50. IO2.8
8. IO2.1 22. IO3.2 37. IO1.16 51. IO1.27
9. IO1.6 23. IO4.0 38. IO1.17 52. IO1.28
10. IO1.7 24. IO1.15 39. IO2.5 53. IO1.29
11. IO1.8 25. IO5.0 40. IO1.18 54. IO2.9
12. IO2.2 26. IO1.16 41. IO1.19
13. IO1.9 27. IO5.1 42. IO1.20
14. IO1.10 28. IO1.17 43. IO2.6
15. IO1.11 29. IO5.2 44. IO1.21

Wall specifications:

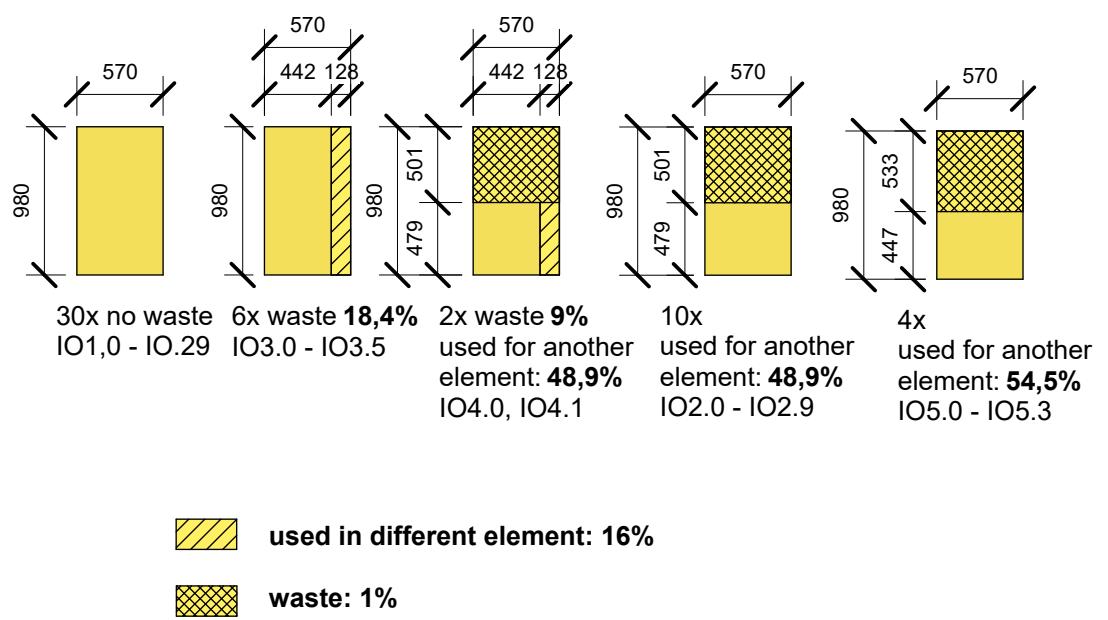
1. 12.5mm Gypsum board REI 30
2. 15mm OSB board
3. 45x45mm c/c 600mm Batten
4. 45mm Mineral wool insulation - Glass Wool
5. 0.2mm DPM
6. 45x195mm Wooden stud
7. 195mm Mineral wool insulation - Glass wool
8. 9mm Wind barrier – Fiber cement
9. 12mm c/c 600mm Distance strip
10. 25x45 Batten
11. 21mm Wooden cladding

SOFT INSULATION - GLASS WOOL 200MM - STEP 7.1

SOFT INSULATION -MINERAL WOOL 245 - ASSEMBLY AND INFORMATION



Cutting list:



<h2 style="text-align: center;">Quality control</h2>	
Insulation assembly:	
Used correct insulation	<input type="checkbox"/>
Mounting in correct order	<input type="checkbox"/>
Properly fixed	<input type="checkbox"/>
Correct dimensions	<input type="checkbox"/>
Properly cover all cavities	<input type="checkbox"/>
No damages on insulation	<input type="checkbox"/>
Name:	Date:
Signature:	

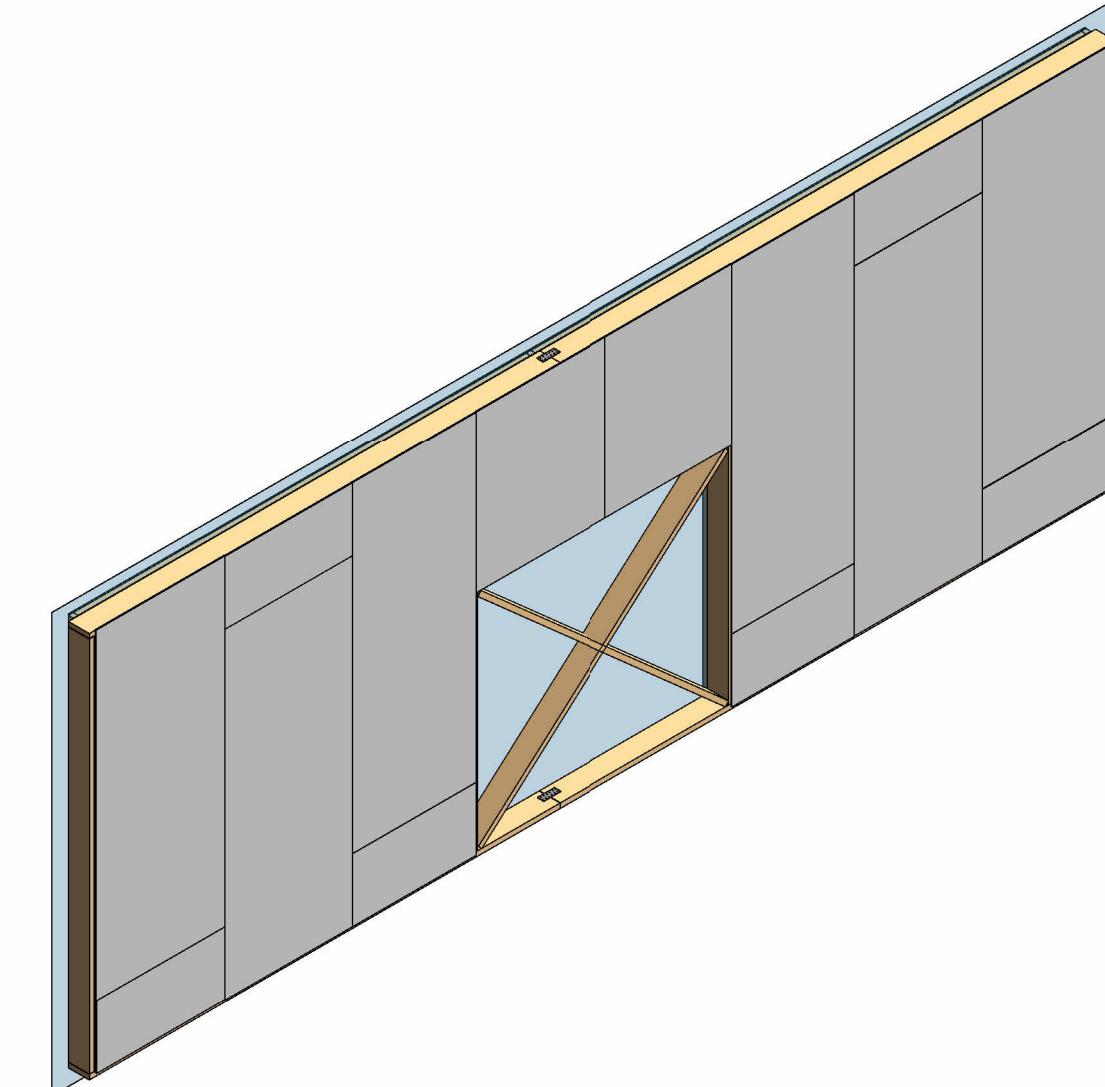
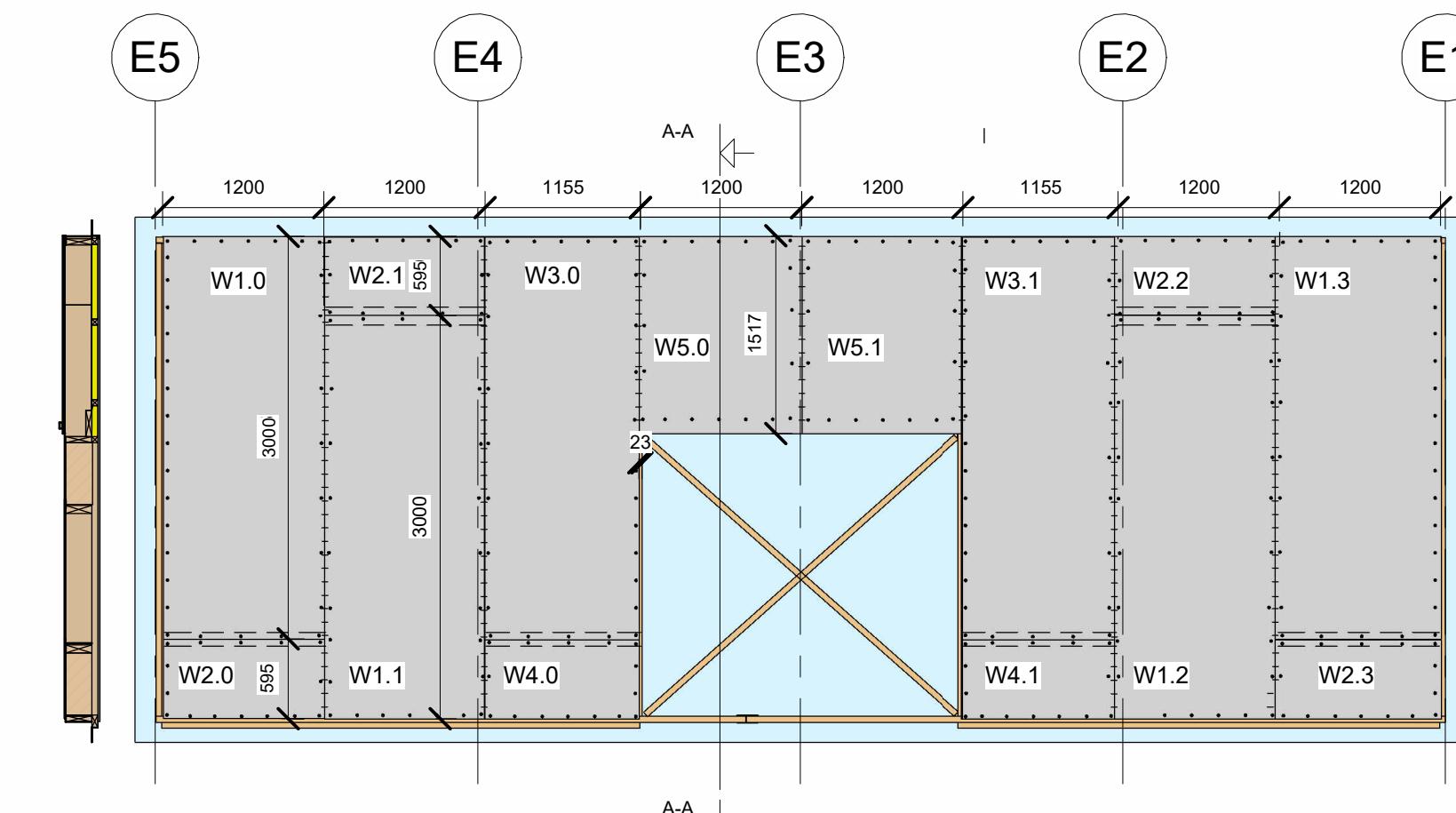
REDDINGTON



PROJECT: Multi purpose sports hall	DATE: 01/12/223	Page 18
SUBJECT:SOFT INSULATION - GLASS WOOL 200MM - STEP 7.1	SCALE: 1 : 50	
DRAWN BY: Abigail Goodman		

WINDBREAKER FIBRE CEMENT BOARD 9MM - STEP 8

WINDBREAKER FIBRE CEMENT BOARD-9MM - ELEMENT VISUALISATION



Mounting sequence:

1. W1.0 9. W3.1
2. W2.0 10. W4.1
3. W2.1 11. W2.2
4. W1.1 12. W1.2
5. W3.0 13. W1.3
6. W4.0 14. W2.3
7. W5.0
8. W5.1

Wall specifications:

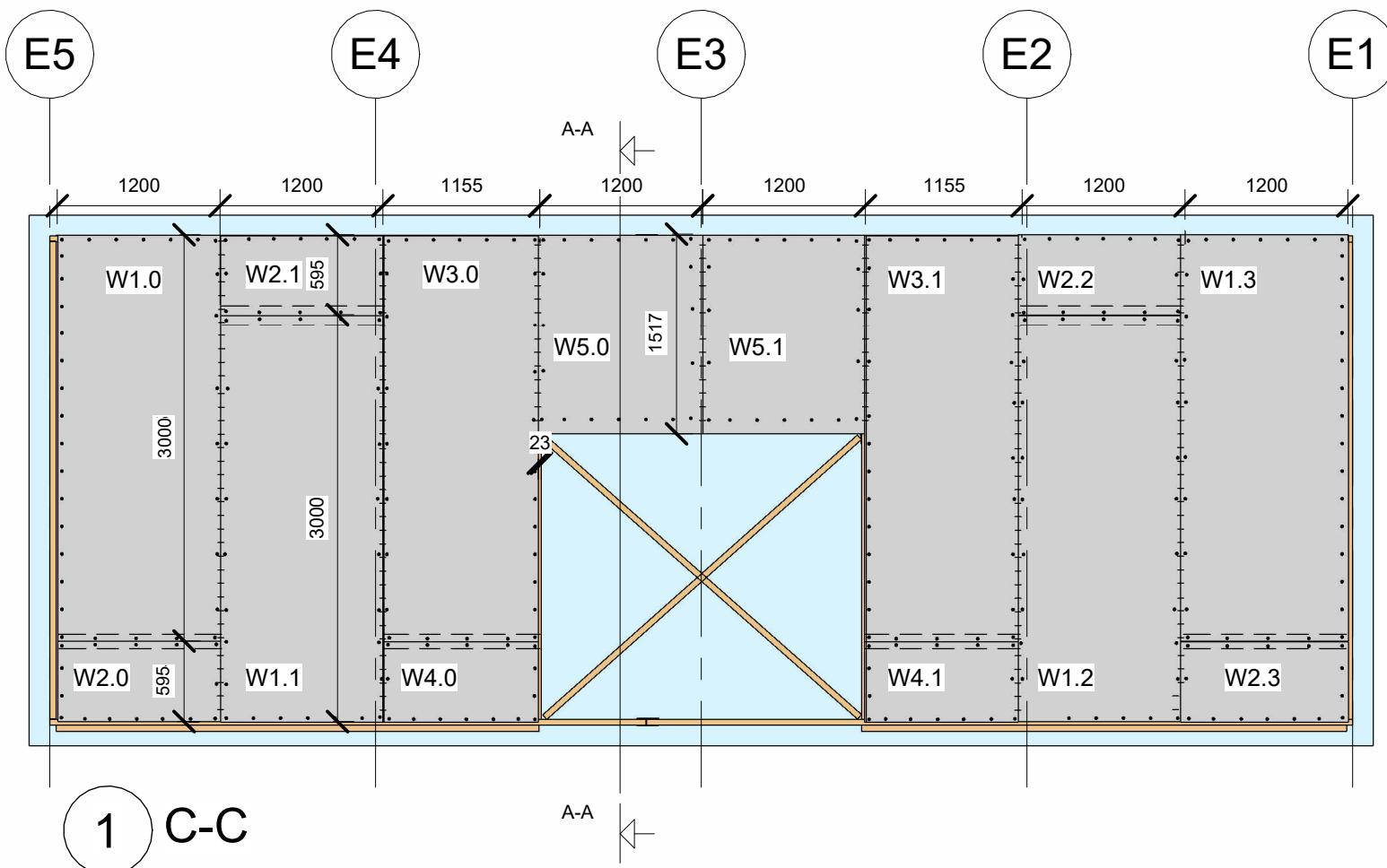
1. 12.5mm Gypsum board REI 30
2. 15mm OSB board
3. 45x45mm c/c 600mm Batten
4. 45mm Mineral wool insulation - Glass Wool
5. 0.2mm DPM
6. 45x195mm Wooden stud
7. 195mm Mineral wool insulation - Glass wool
8. 9mm Wind barrier - Fiber cement
9. 12mm c/c 600mm Distance strip
10. 25x45 Batten
11. 21mm Wooden cladding

Type	Length	Height	Count
------	--------	--------	-------

9 mm windbreaker	1200	3000	4
9 mm windbreaker	1155	3000	2
9 mm windbreaker	1200	595	4
9 mm windbreaker	1155	595	2
9 mm windbreaker	1200	1517	2

WINDBREAKER FIBRE CEMENT BOARD 9MM- STEP 8.1

WINDBREAKER FIBRE CEMENT BOARD-9MM - ASSEMBLY AND INFORMATION



Information:

Manufacturer: Cambrit
Material: Fiber cement
Type: Cembrit Windstopper Basic
Thermal conductivity: 0.34 (W/m·K)
Fire class: A2-s1, d0
Available boards dimensions:
Thickness: 9mm
Width: 1200mm
Length: 2400/2700/3000mm



Screws: NKT spun+ climate screw 4.0*30 mm
Sealing tape: Cembrit Windstopper Tape 75 mm
Collection profiles:

1. Vertical support: Cembrit 12 h rail
2. Horizontal supports: Cembrit 13 H rail

Note: Cembrit Windstopper must be installed with all edges supported.

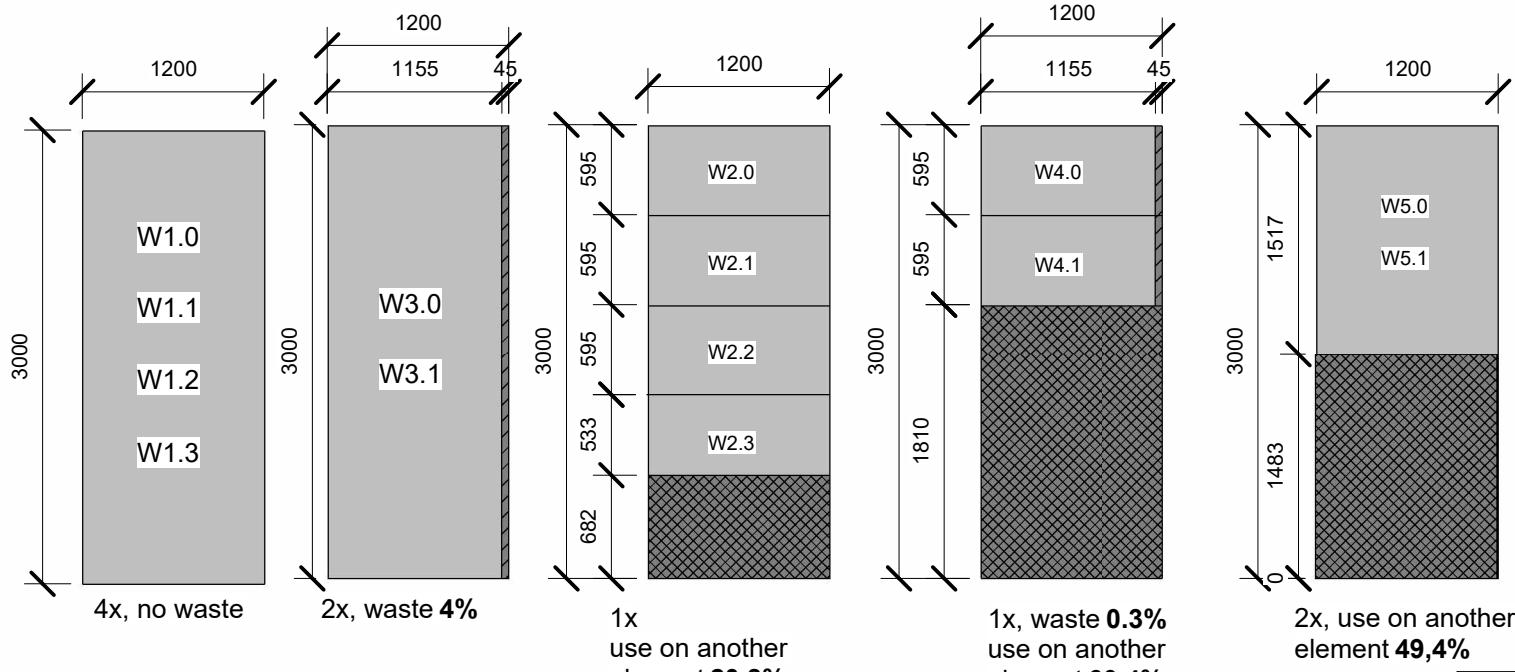
Assembly:

Windbreaker is screwed with screws 200mm c/c on the edges and 300mm c/c inside. Boards are connected with each other with the staples 100mm c/c. The tape is mounted both over horizontal and vertical joints, also when these are mounted with profiles. The final windbreaker must be defined as tight.

The windbreaker board must be fixed according to the mounting sequence.

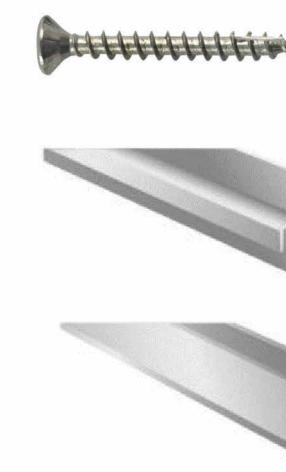
If it is needed to cut fibre cement board use special saw.

Cutting list:



waste: 1,6%

use on another element: 15,6%



Quality control

Windbreaker assembly:

- Used correct board
- Mounting in correct order
- Properly fixed
- Correct dimensions
- Properly cover all insulation
- No damages on windbreaker

Name: _____ Date: _____

Singature: _____

PROJECT: Multi purpose sports hall

DATE: 01/12/2023

SUBJECT: WINDBREAKER FIBRE CEMENT BOARD 9MM-
STEP 8.1

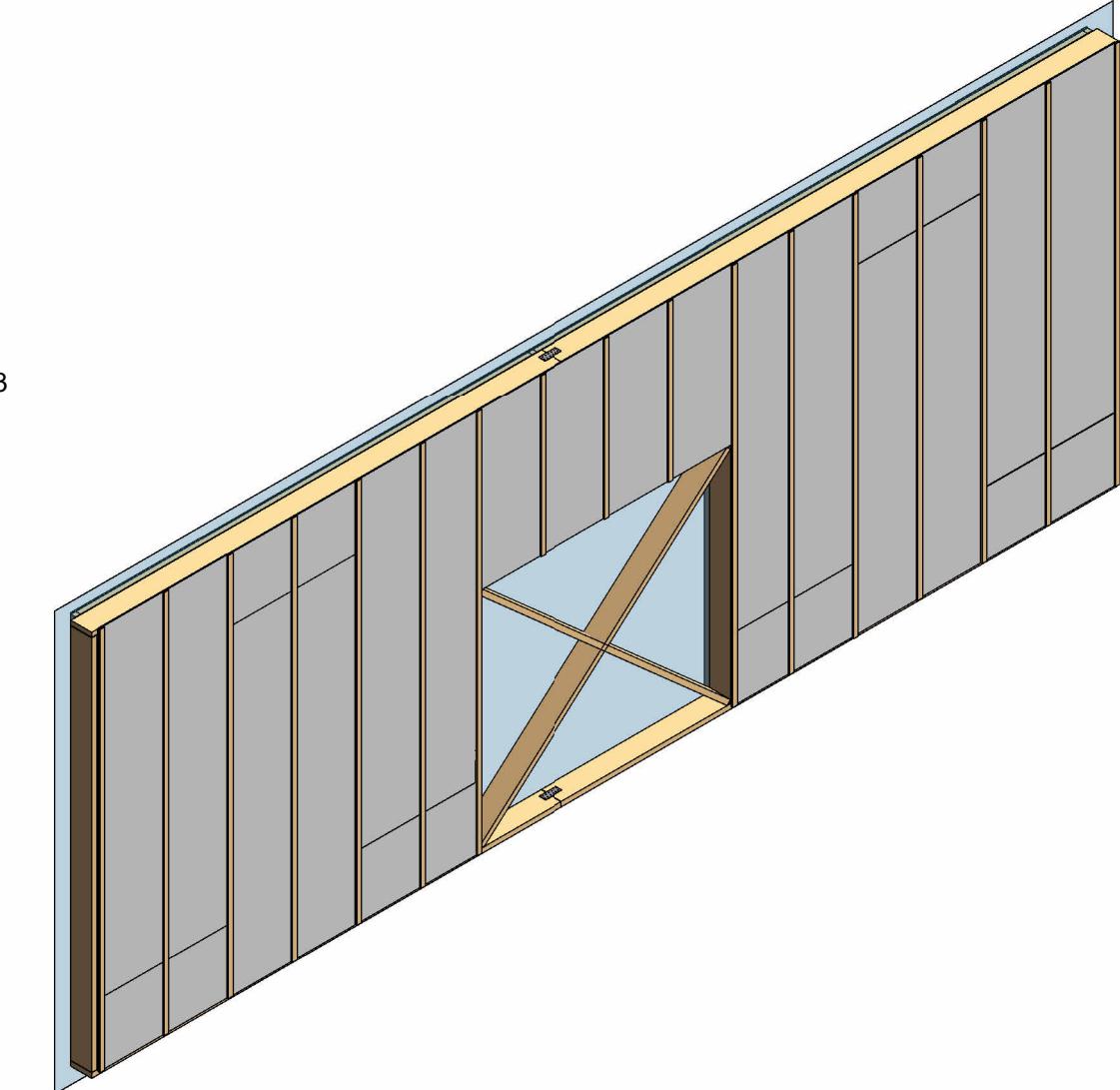
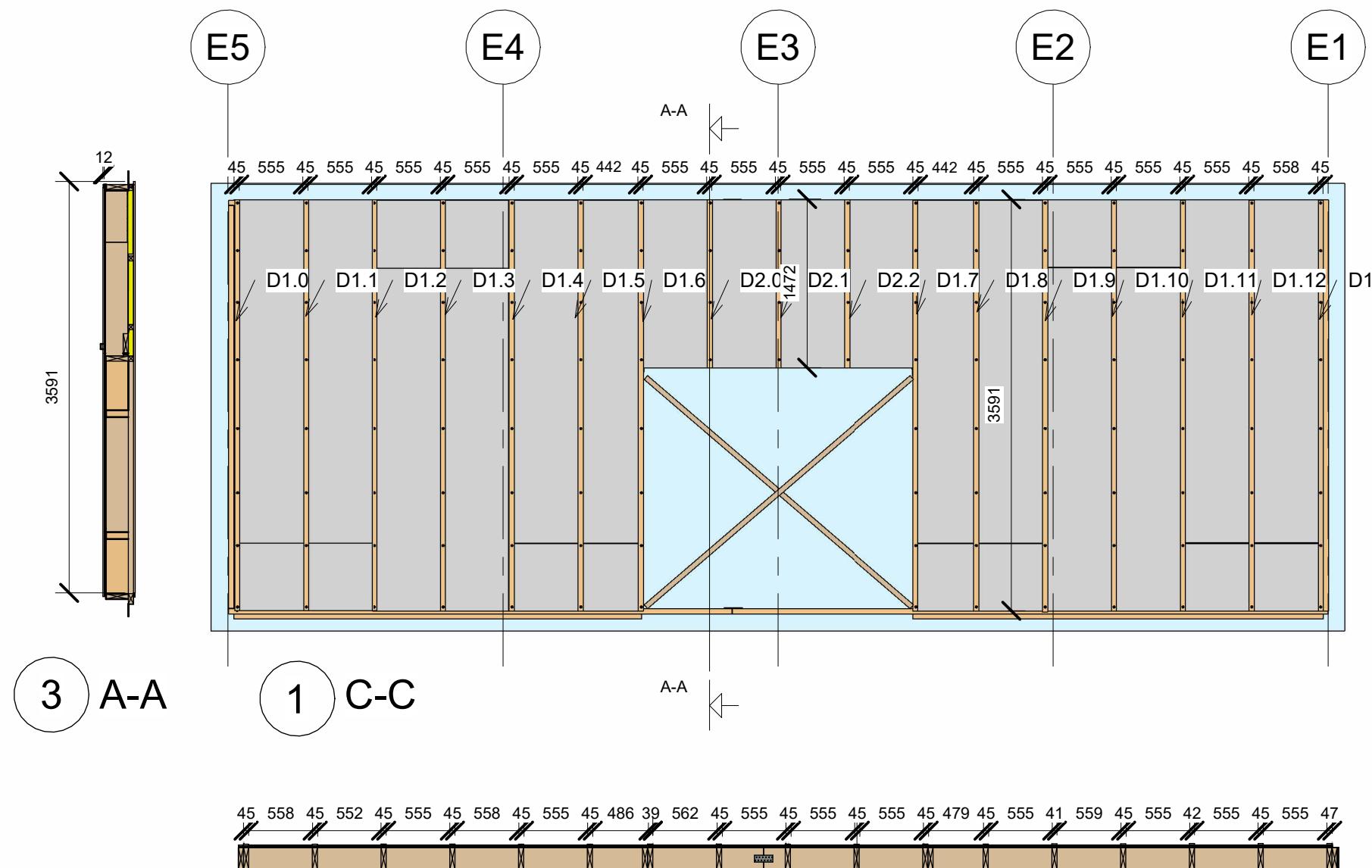
DRAWN BY: Abigail Goodman

SCALE: 1 : 50



DISTANCE STRIP 12MM X 45MM- STEP 9

DISTANCE STRIP 12MM X 45MM - ELEMENT VISUALISATION



Wall specifications:

- | | | |
|--------------------|-----------|---|
| Mounting sequence: | 1. | 12.5mm Gypsum board REI 30 |
| | 2. | 15mm OSB board |
| | 3. | 45x45mm c/c 600mm Batten |
| 1.D1.0 | 8. D1.6 | 4. 45mm Mineral wool insulation - Glass Wool |
| 2. D1.1 | 9. D1.7 | 5. 0.2mm DPM |
| 3. D1.2 | 10. D1.8 | 6. 45x195mm Wooden stud |
| 4. D1.3 | 11. D1.9 | 7. 195mm Mineral wool insulation - Glass wool |
| 5. D1.4 | 12. D1.10 | 8. 9mm Wind barrier - Fiber cement |
| 6. D1.5 | 13. D1.11 | 9. <u>12mm c/c 600mm Distance strip</u> |
| 7. D2.0 | 14. D1.12 | 10. 25x45 Batten |
| 6. D2.1 | 15. D1.13 | 11. 21mm Wooden cladding |
| 7. D2.2 | | |

Horizontal batten		
Type	Length	Count

12x45 mm timber	3595	13
12x45 mm timber	1500	3

PROJECT: Multi purpose sports hall

DATE:01/12/2023

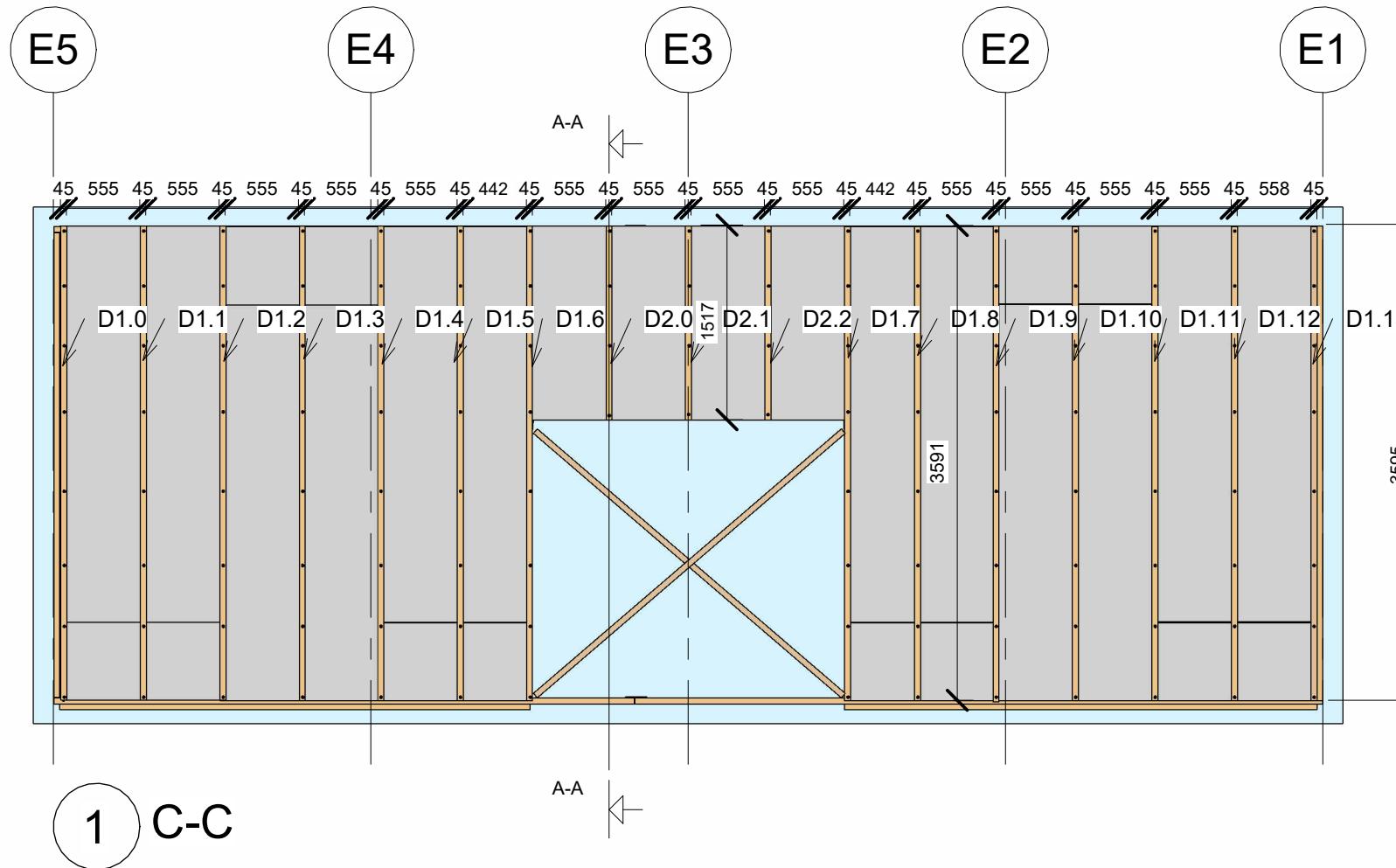
SUBJECT:DISTANCE STRIP 12MM X 45MM- STEP 9

DRAWN BY: Abigail Goodman

-VIA>

DISTANCE STRIP 12MM X 45MM - STEP 9.1

DISTANCE STRIP 12MM X 45MM - ASSEMBLY AND INFORMATION



Information:

Manufacturer: DAN-WOOD Sawmill
Material: Timber
Quality: C14
Bending strength: 18Mpa
Surface: Planned

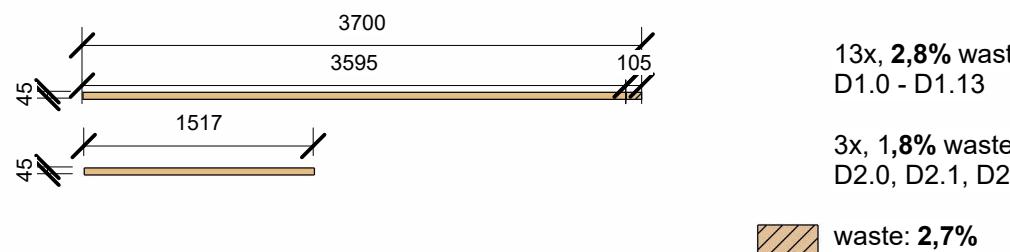
- NKT spun+ climate screw 4.0*50 mm

Assembly:

Assemble the distance strip to the windbreaker with screws in the specified sequence of assembly.

Screws should be used where the drawing specifies in order to secure the distance strip to windbreaker loadbearing frame. Distance strip should be screwed around 450mm c/c where it is possible.

Cutting list:



Quality control

Distance strip assembly:

- Used correct strip
- Mounting in correct order
- Properly fixed
- Correct dimensions
- No damages on battens

Name: _____ Date: _____

Singature: _____



REDDINGTON

VIA >

PROJECT: Multi purpose sports hall

DATE: 01/12/2023

SUBJECT: DISTANCE STRIP 12MM X 45MM - STEP 9.1

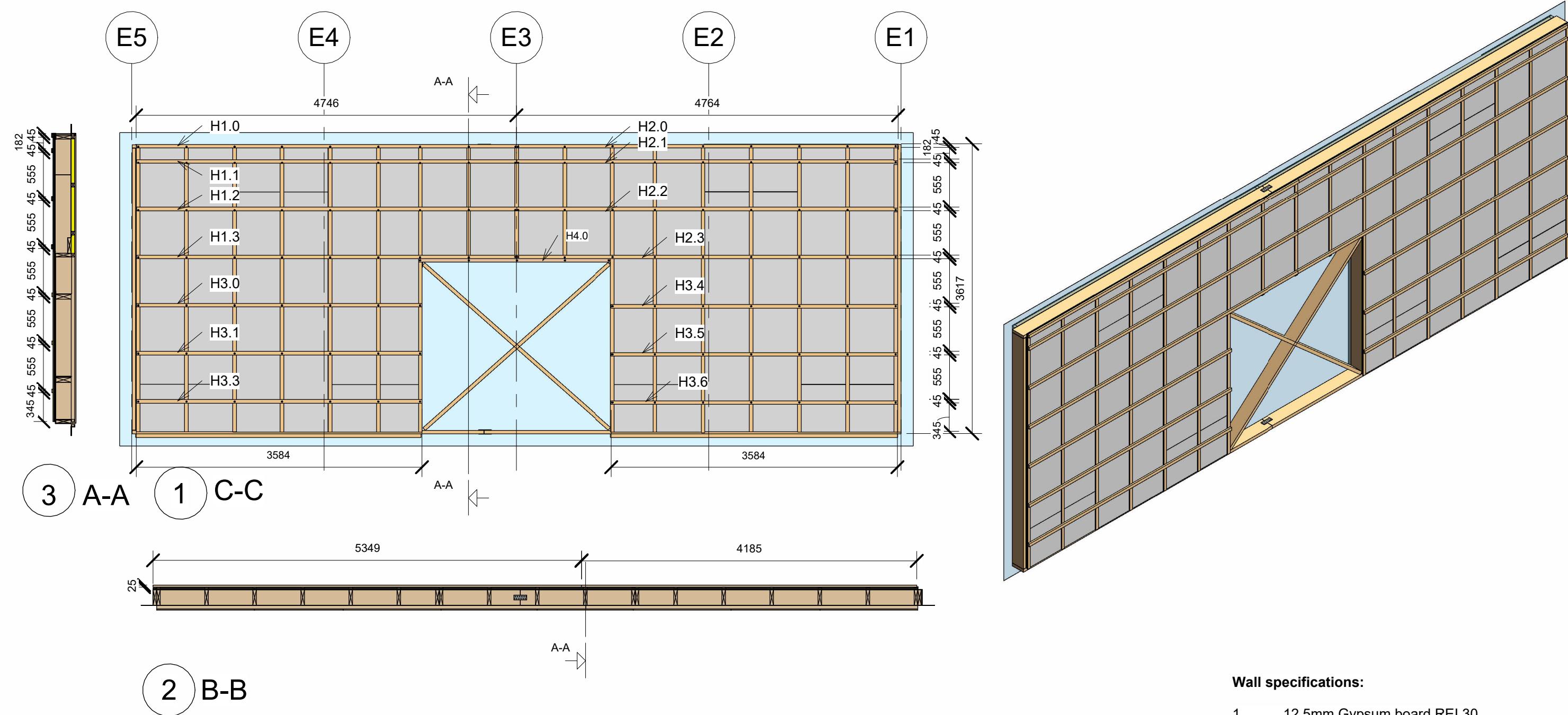
DRAWN BY: Abigail Goodman

SCALE: 1 : 50

Page 22

HORIZONTAL BATTENS 25MM X 45MM - STEP 10

HORIZONTAL BATTENS 25MM X 45MM - ELEMENT VISUALISATION



Wall specifications:

- Mounting sequence:**
1. H1.0 9. H3.0
 2. H2.0 10. H3.1
 3. H1.1 11. H3.2
 4. H2.1 12. H3.3
 5. H1.2 13. H3.4
 6. H2.2 14. H3.5
 7. H1.3 15. H3.6
 8. H2.3

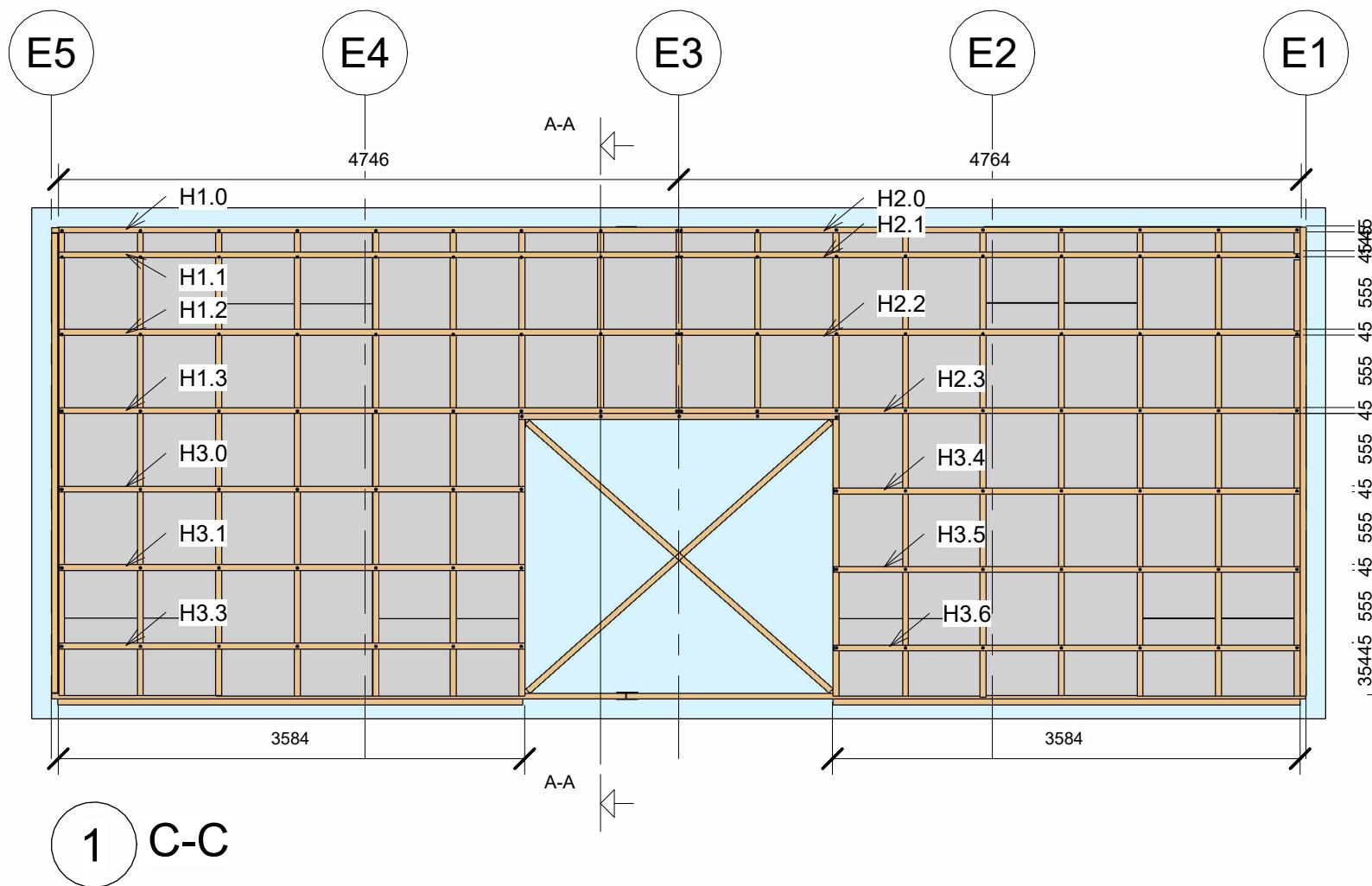
1. 12.5mm Gypsum board REI 30
2. 15mm OSB board
3. 45x45mm c/c 600mm Batten
4. 45mm Mineral wool insulation - Glass Wool
5. 0.2mm DPM
6. 45x195mm Wooden stud
7. 195mm Mineral wool insulation - Glass wool
8. 9mm Wind barrier - Fiber cement
9. 12mm c/c 600mm Distance strip
10. 25x45 Batten
11. 21mm Wooden cladding

Horizontal batten		
Type	Length	Count
25x45 mm timber	4764	4
25x45 mm timber	4746	4
25x45 mm timber	3578	7
25x45 mm timber	2445	1

25x45 mm timber	4764	4
25x45 mm timber	4746	4
25x45 mm timber	3578	7
25x45 mm timber	2445	1

HORIZONTAL BATTENS 25MM X 45MM- STEP 10.1

HORIZONTAL BATTENS 25MM X 45MM - ASSEMBLY AND INFORMATION



Information:

Manufacturer: DAN-WOOD Sawmill
Material: Timber
Quality: C14
Bending strength: 18Mpa
Surface: Planned

Screws: NKT spun+ universal screw 5.0*70 mm

Assembly:

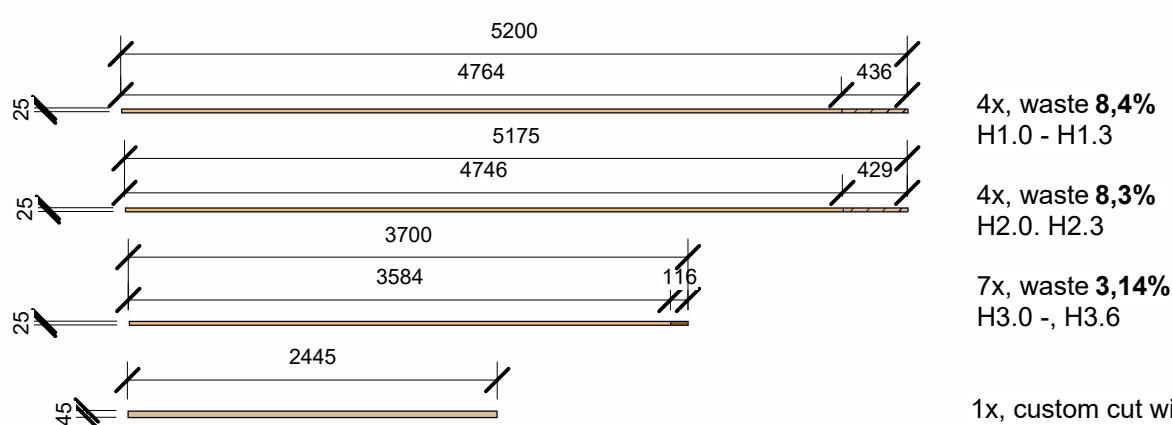
Assemble the horizontal battens according to the order of assembly sequence.

Fix the horizontal battens using screws to each single distance strip.

The last horizontal battens on the bottom for the wooden cladding will be done on site.

1 C-C

Cutting list:



1x, custom cut without any waste,
elements: H4.0

waste: 6,3%

Quality control

Horizontal battens assembly:

- Used correct strip
- Mounting in correct order
- Properly fixed
- Correct dimensions
- No damages on battens



Name: _____ Date: _____

Singature: _____

REDDINGTON

VIA

PROJECT: Multi purpose sports hall

DATE: 01/12/2023

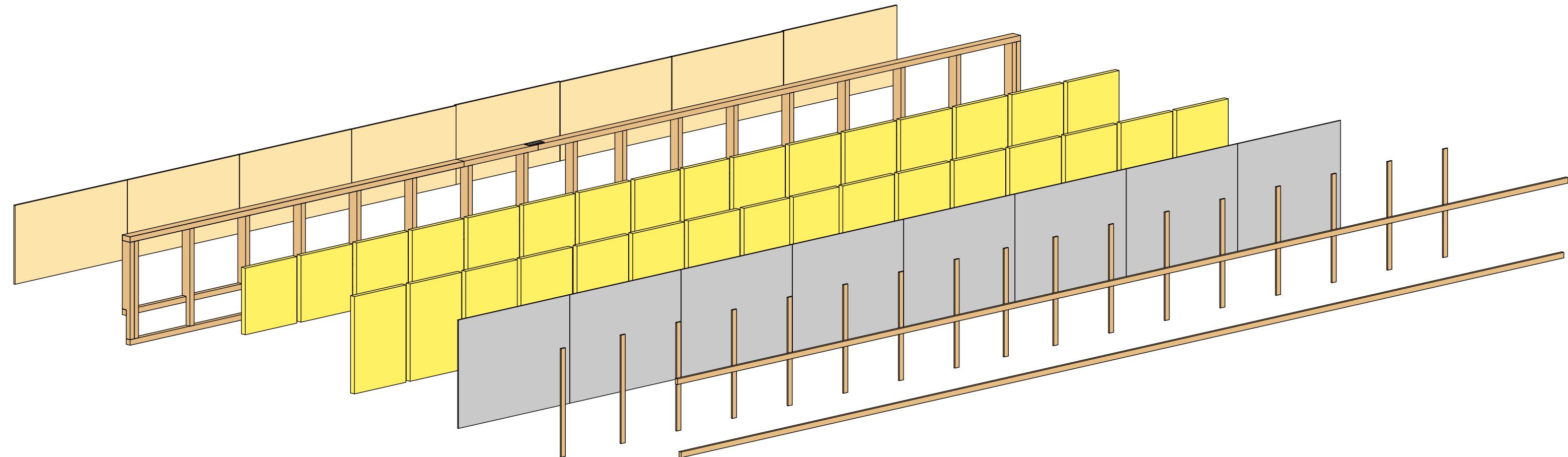
SUBJECT:HORIZONTAL BATTENS 25MM X 45MM- STEP 10.1

DRAWN BY: Abigail Goodman

SCALE: 1 : 50

PRODUCTION OF PREFABRICATED WOODEN PARAPET ELEMENT

PARAPET IDENTIFICATION CODE: PS - 14
 PROJECT: Multi purpose sports hall
 ELEMENT TYPE: External wooden parapet element
 MANUFACTURER: Reddington company



Wall specification:

1. 2-layers of bitumen felt
2. 15mm OSB boards
3. 95mm Glass wool insulation
4. 45x90mm Wooden stud
5. 9mm Wind barrier – Fiber cement
6. 12mm c/c 600mm Distance strip
7. 25x45 Horizontal Batten
8. 21mm Wooden cladding

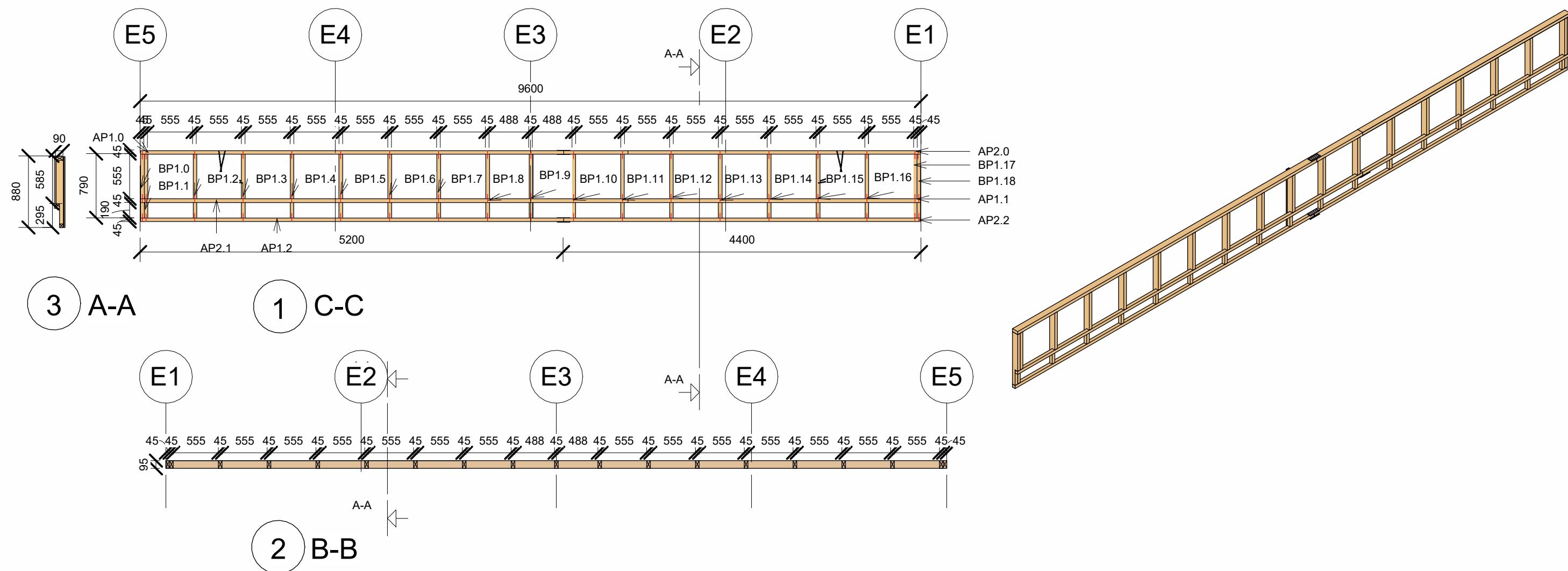
Assembly sequence:

1. Wooden frame
2. OSB Board
3. Soft insulation
4. Flipping the element
5. Windbreaker fibre cement board
6. Distance strip
7. Horizontal battens
8. Vertical cladding

PROJECT: Multi purpose sport hall	DATE: 01/12/2023	
SUBJECT: Production of prefabricated wooden parapet element		
DRAWN BY: Abigail Goodman	SCALE:	

WOODEN FRAME-PARAPET - STEP 11

WOODEN FRAME-PARAPET - ELEMENT VISUALISATION



Mounting sequence:

1. AP1.0 13. BP1.11
2. AP2.0 14. BP1.12
2. BP1.0 15. BP1.13
3. BP1.1 16. BP1.14
4. BP1.2 17. BP1.15
5. BP1.3 18. BP1.16
6. BP1.4 19. BP1.17
7. BP1.5 20. BP1.18
8. BP1.6 21. AP2.1
9. BP1.7 22. AP1.1
10. BP1.8 23. AP1.2
11. BP1.9 24. AP2.2
12. BP1.10

Parapet specification:

1. 2-layers of bitumen felt
2. 15mm OSB boards
3. 90mm Soft insulation
4. 45x90mm Wooden stud
5. 9mm Wind barrier – Fiber cement
6. 12mm c/c 600mm Distance strip
7. 25x45 Horizontal Batten
8. 21mm Wooden cladding

Load bearing wooden frame		
Type	Length	Count
45x90 mm timber	5200	1
45x90 mm timber	4400	1
45x90 mm timber	880	11
45x45 mm timber	5200	2
45x45 mm timber	4400	2

PROJECT: Multi purpose sport hall

DATE: 01/12/2023

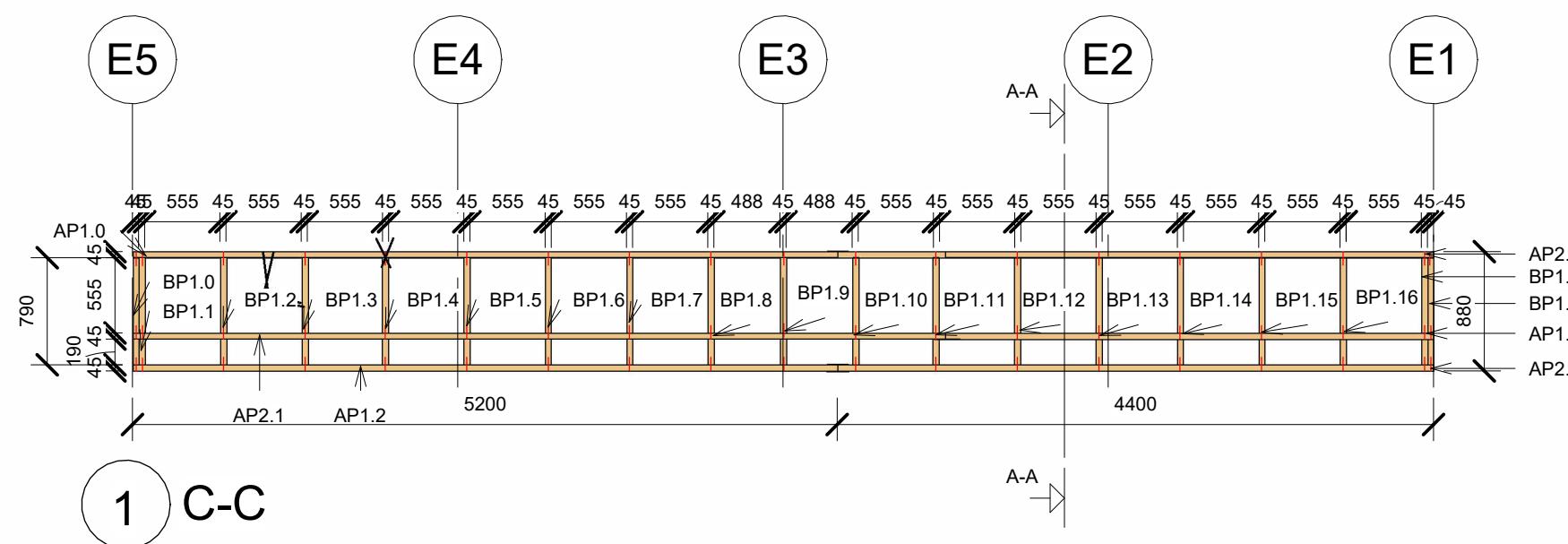
SUBJECT: WOODEN FRAME-PARAPET - STEP 11

SCALE: 1 : 50

DRAWN BY: Abigail Goodman

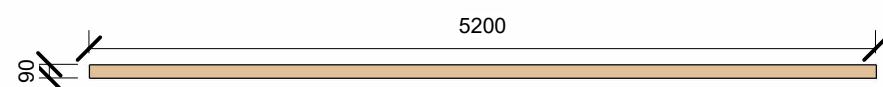
WOODEN FRAME-PARAPET - STEP 11.1

WOODEN FRAME-PARAPET - ASSEMBLY AND INFORMATION

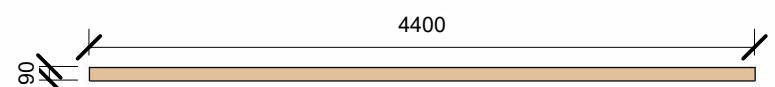


1 C-C

Cutting list:



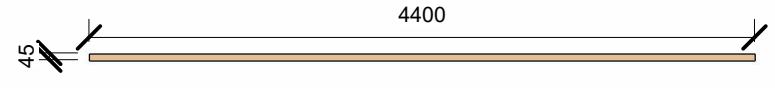
1x no waste element
AP1.0



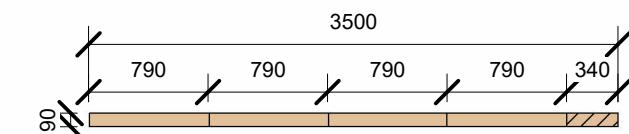
1x, no waste element
AP2.0



2x, no waste element
AP2.1, AP2.2



2x no waste element
AP1.1, AP1.2



11x, waste 9,7%
BP1.0 - BP1.18

waste: 6.5%

Information:

Manufacturer: DAN-WOOD Sawmill
Material: Timber
Quality: C14
Bending strength: 18Mpa
Surface: Planned
Fire resistance: D-s2, d0

Rope: Randers 3-Strand Danaflex O02-0140-004B
Screws: NKT spun+ climate screw 6.0*100 mm

Assembly:

Assemble the load-bearing wooden frame in the specified sequence of assembly. Verify the diagonal measurement and the corner's angel, which should both be 90 degrees.

Screws should be used where the drawing specifies in order to secure the studs.

Installing lifting ropes at equal distances from the element's center of gravity is necessary. Drilling the rope holes at least 400 mm* below the top of the stud will prevent interference with the frame screws and excessive pressure on that connection.

*To be calculated in engineering project.

Quality control

Wood frame assembly:

- Used correct studs
- Fixing in correct order
- Properly fixed
- Correct dimensions
- No damages on wood



Name: _____ Date: _____

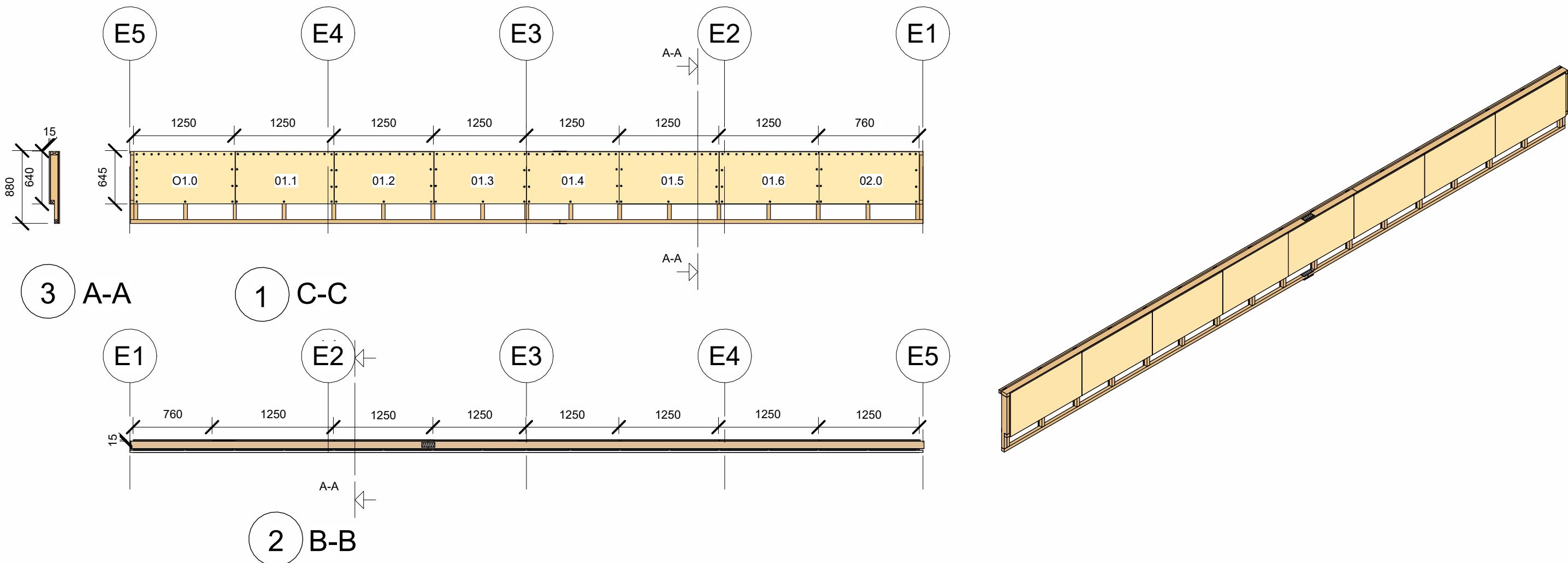
Singature: _____

REDDINGTON 

PROJECT: Multi purpose sport hall	DATE: 01/12/2023	Page 27
SUBJECT: WOODEN FRAME-PARAPET - STEP 11.1		
DRAWN BY: Abigail Goodman	SCALE: 1 : 50	

OSB BOARD 15MM - PARAPET - STEP 12

OSB BOARD - ELEMENT VISUALISATION



OSB Board			
Type	Length	Height	Count
15 mm OSB board	1250	645	7
15 mm OSB board	760	645	1

Mounting sequence:

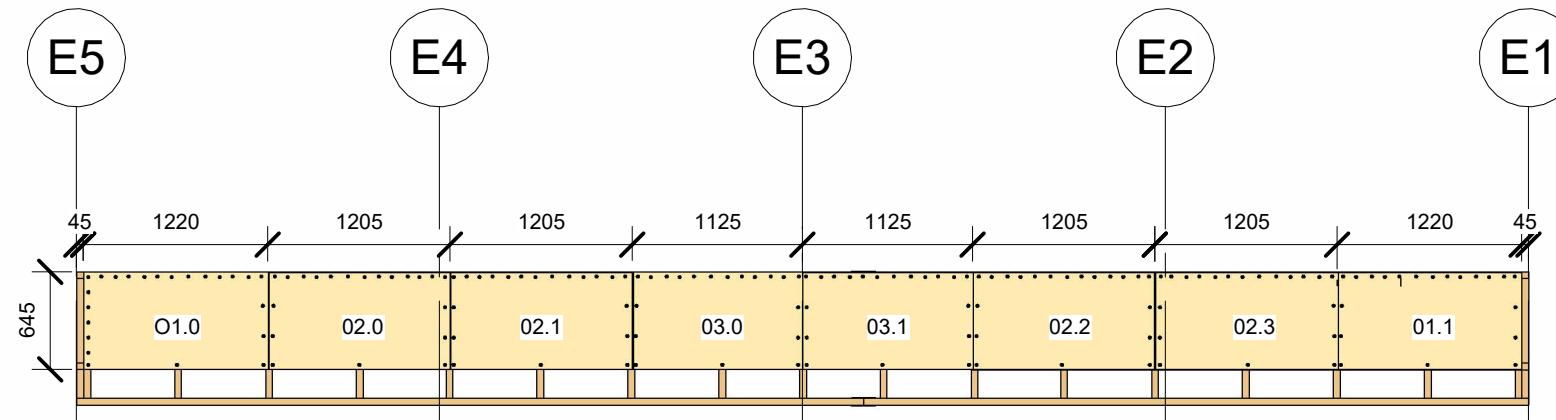
1. O1.0
2. O1.1
3. O1.2
4. O1.3
5. O1.4
6. O1.5
7. O1.6
8. O2.0

Parapet specification:

1. 2-layers of bitumen felt
2. 15 mm OSB boards
3. 90mm Glass wool insulation
4. 45x90mm Wooden stud
5. 9mm Wind barrier – Fiber cement
6. 12mm c/c 600mm Distance strip
7. 25x45 Horizontal Batten
8. 21mm Wooden cladding

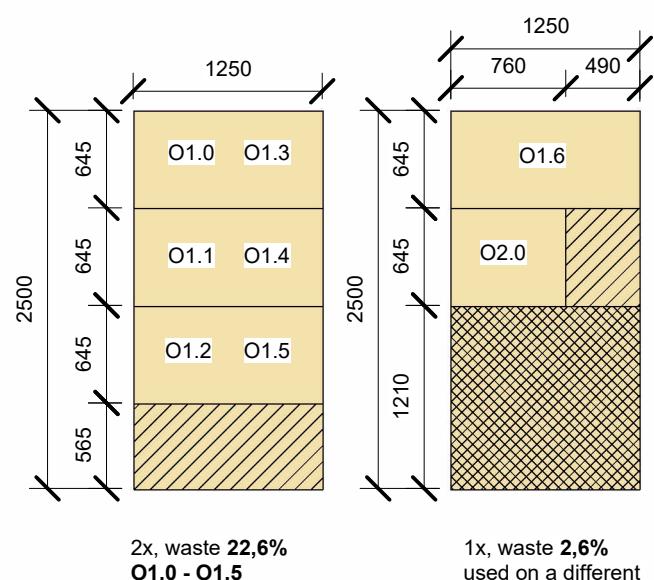
OSB BOARD 15MM - STEP 12.1

OSB BOARD - ASSEMBLY AND INFORMATION



1 C-C

Cutting list:



use on a different element: 18,6%

waste: 3%

Information:

Manufacturer: NPI
Material: Soft wood
Type: OSB-3 Kronospan
Thermal conductivity: 0.13 (W/m·K)
Density: 570-620 kg/m³
Fire class: D-s2,d0
Moisture class: 2
Dimensions of board: 2500x1250mm
Screws: NKT spun+ climate screw 4.0*30 mm

Assembly:

The mounting sequence must be followed when fixing the OSB Board.

When the boards are joined by a groove, the closest studs are fastened rather than the edge.

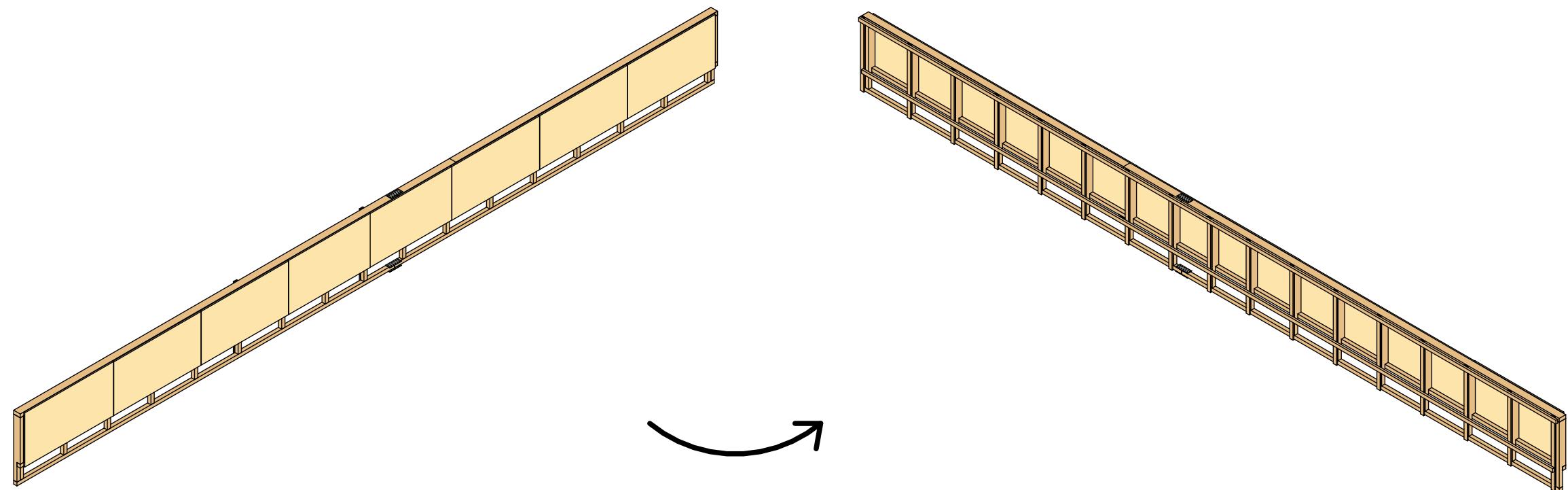
The boards have nails 300 mm c/c inside and 150 mm c/c on the edges.



Quality control	
OSB Board assembly:	
Used correct OSB Board	<input type="checkbox"/>
Mounting in correct order	<input type="checkbox"/>
Properly fixed	<input type="checkbox"/>
Correct dimensions	<input type="checkbox"/>
Properly cover insulation and studs	<input type="checkbox"/>
No damages on boards	<input type="checkbox"/>
Name:	Date:
Signature:	

REDDINGTON 

PROJECT: Multi purpose sport hall	DATE: 01/12/2023	Page 29
SUBJECT: OSB BOARD 15MM - STEP 12.1		
DRAWN BY: Abigail Goodman	SCALE: 1 : 50	



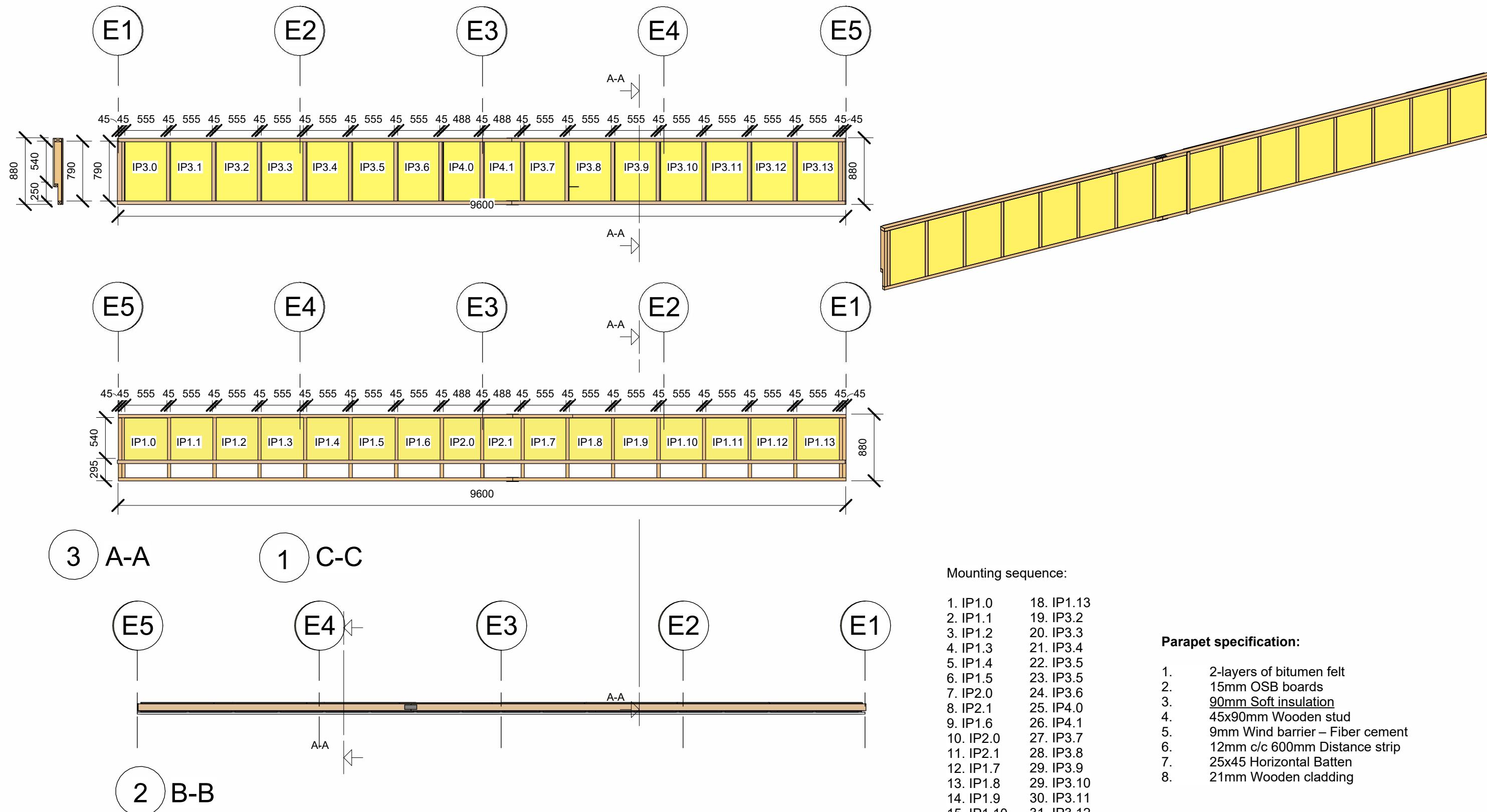
Flipping the element 180°

Note: The wall element should be flipped 180 degrees without causing any damage.

PROJECT: Multi purpose sport hall	DATE: 01/12/2023	VIA >
SUBJECT: Flipping the element		
DRAWN BY: Abigail Goodman	SCALE:	

SOFT INSULATION - GLASS WOOL - PARAPET - STEP 13

SOFT INSULATION - GLASS WOOL - ELEMENT VISUALISATION

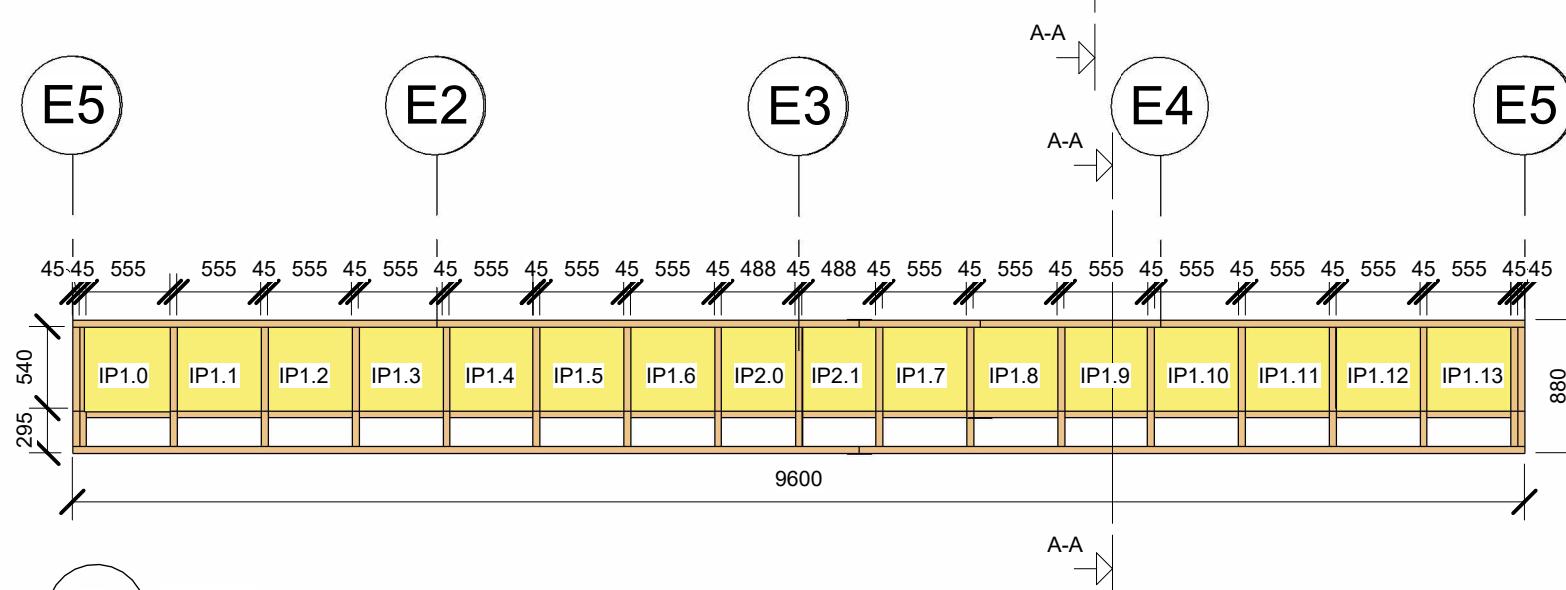
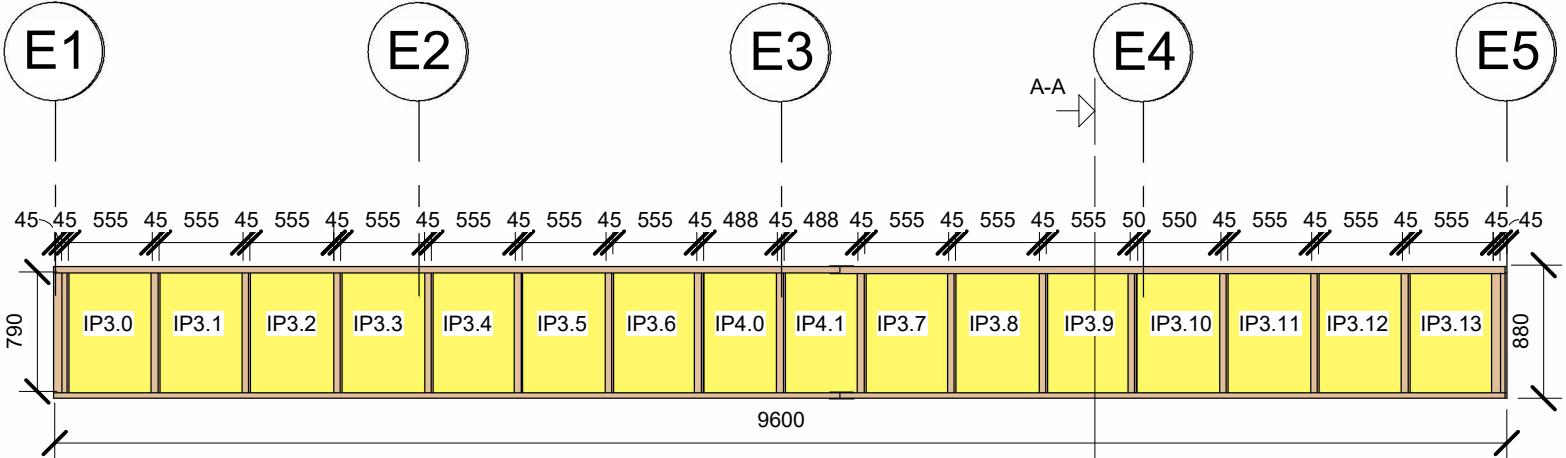


195mm Glass wool insulation			
Type	Length	Height	Count
45 mm glass wool insulation	540	570	16
45 mm glass wool insulation	570	790	16

PROJECT: Multi purpose sport hall	DATE: 01/12/2023	Page 31
SUBJECT: SOFT INSULATION - GLASS WOOL - PARAPET -	STEP 13	
DRAWN BY: Abigail Goodman	SCALE: 1 : 50	

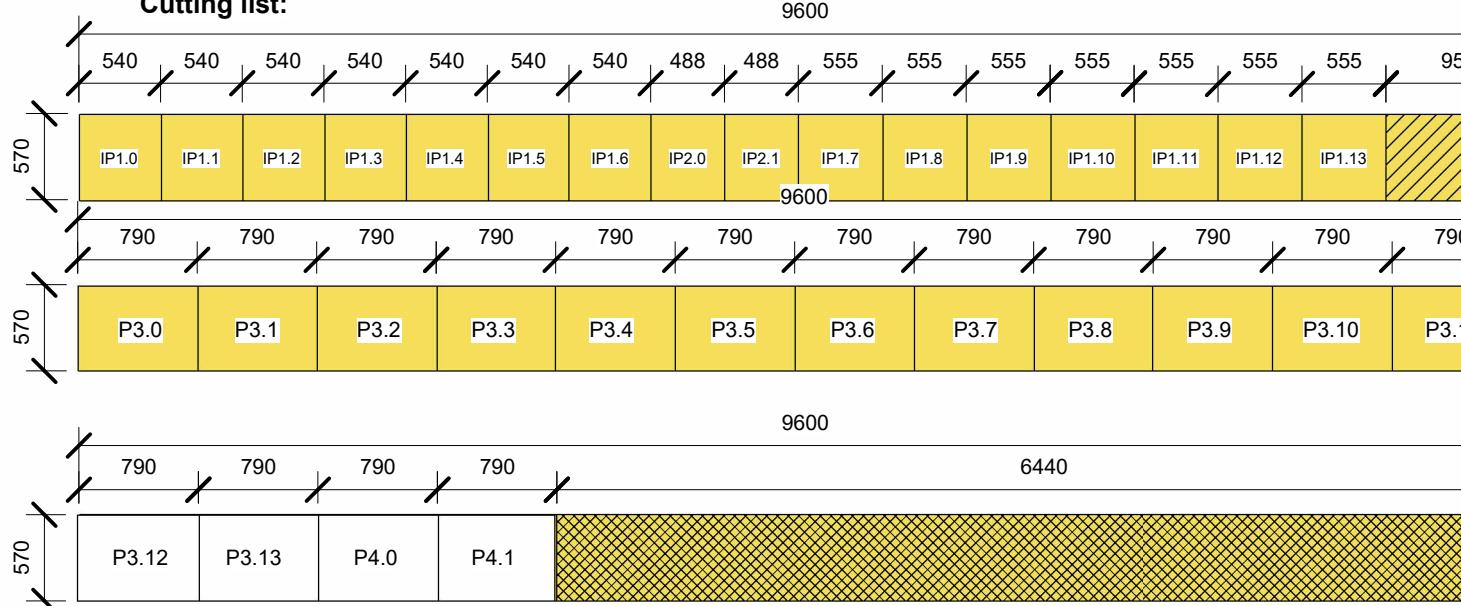
SOFT INSULATION - GLASS WOOL - PARAPET - STEP 13.1

SOFT INSULATION - GLASS WOOL - PARAPET - ASSEMBLY AND INFORMATION



1 C-C

Cutting list:



waste: 3,7%

use in another element: 22,4%

Information:

Manufacturer: Isover
Material: Glass wool
Type: ISOVER Rolls 34
Thermal conductivity: 0.034 (W/m·K)
Fire class: A2-s1,d0



Assembly:

ISOVER Rolls 34 comes fully prepacked and compressed in the roll.

A single roll measures 45x570x9600mm. Insulation will be squeezed in between the battens, in total 15mm. The insulation roll needs to be cut into pieces. To accomplish this, a specialized insulating knife must be used.



Using the cutting list provided below, cut the insulation. Each piece of mineral wool must be positioned in accordance with the mounting procedure outlined on page 31.

Note:

Recycle

ISOVER Rolls 34 are delivered to landfill as mineral waste at recycling stations. The glass wool can be included circularly and should be sorted as mineral wool. The packaging shall be disposed of in accordance with national rules.

Quality control

Insulation assembly:

- Used correct insulation
- Mounting in correct order
- Properly fixed
- Correct dimensions
- Properly cover all cavities
- No damages on insulation

Name: _____ Date: _____

Singature: _____

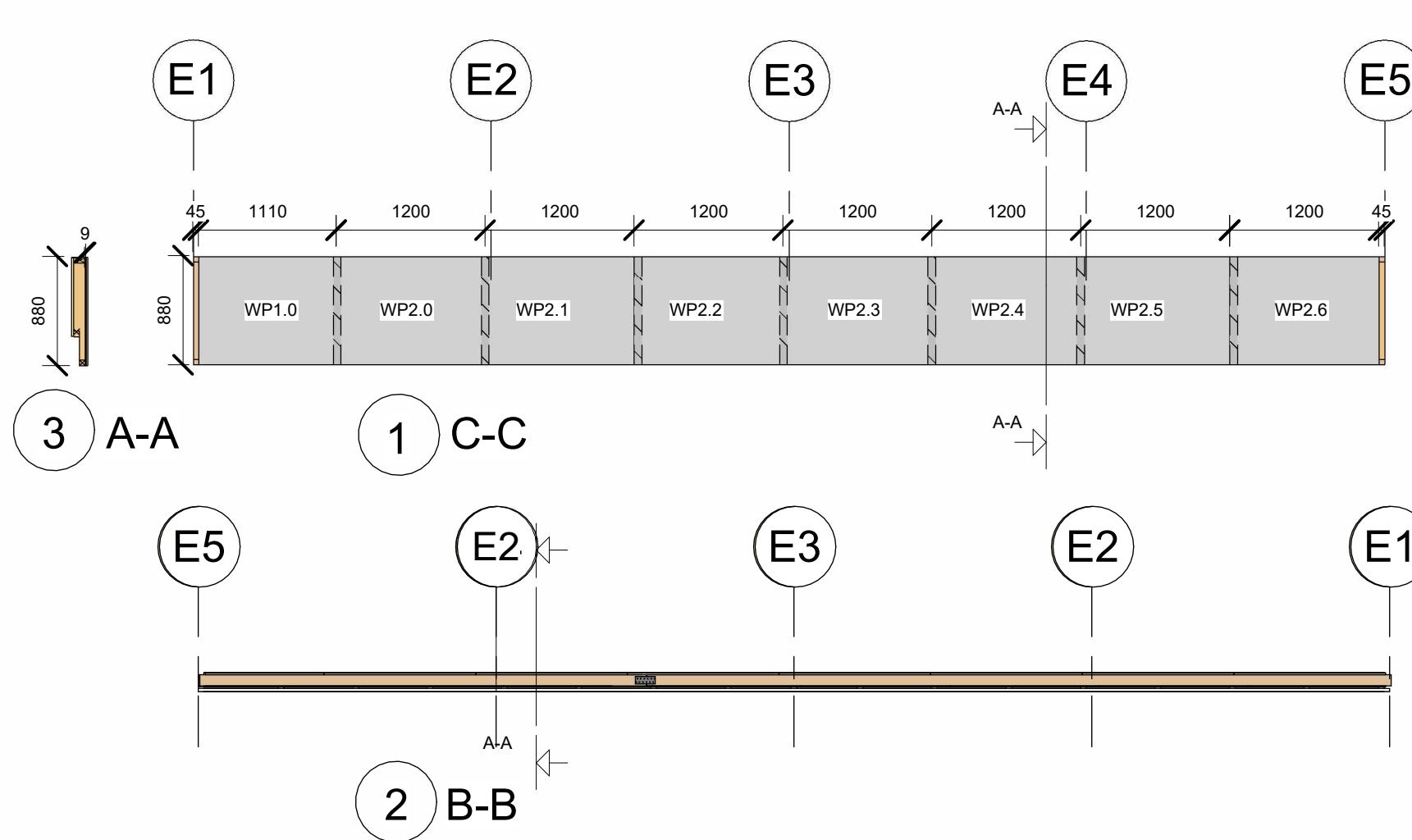
PROJECT: Multi purpose sport hall

SUBJECT: SOFT INSULATION - GLASS WOOL - PARAPET -
STEP 13.1

DRAWN BY: Abigail Goodman

WINDBREAKER FIBRE CEMENT BOARD 9MM - PARAPET - STEP 15

WINDBREAKER FIBRECEMENT BOARD 9MM - ELEMENT VISUALISATION



OSB Board			
Type	Length	Height	Count
9 mm OSB board	1200	880	6
9 mm OSB board	1110	880	1

Mounting sequence:

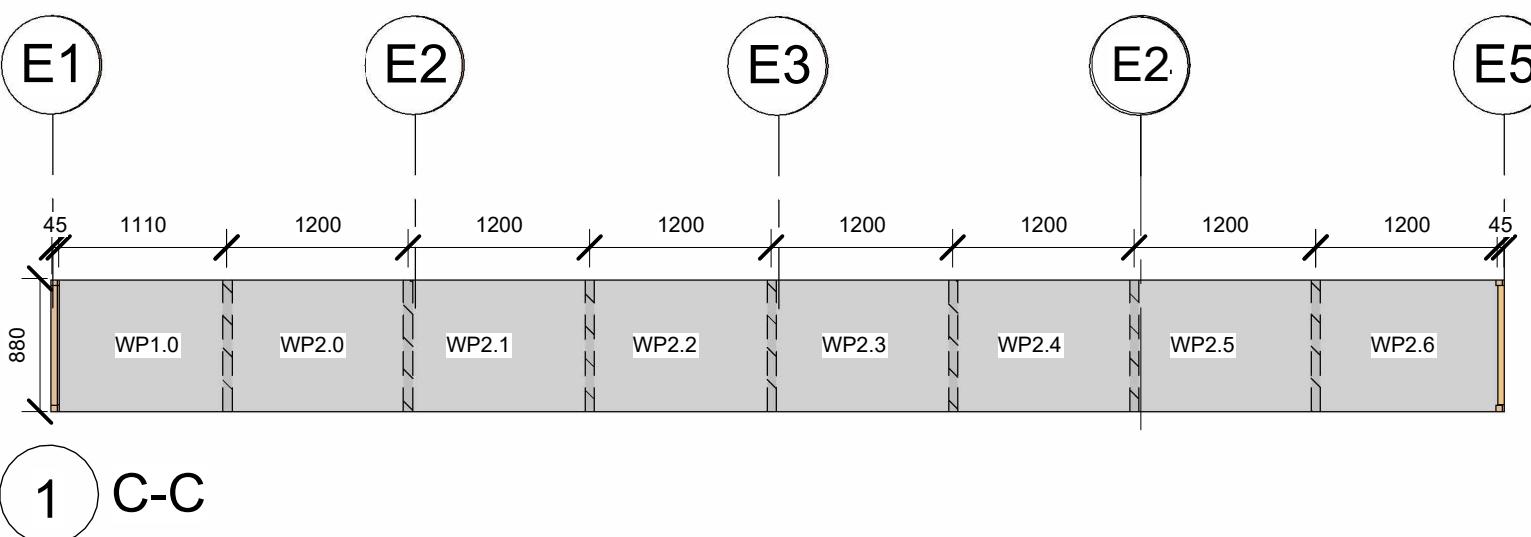
1. WP1.0
2. WP2.0
3. WP2.1
4. WP2.2
5. WP2.3
6. WP2.4
7. WP2.5
8. WP2.6

Parapet specification:

1. 2-layers of bitumen felt
2. 15mm OSB boards
3. 90mm Glass wool insulation
4. 45x90mm Wooden stud
5. 9mm Wind barrier – Fiber cement
6. 12mm c/c 600mm Distance strip
7. 25x45 Horizontal Batten
8. 21mm Wooden cladding

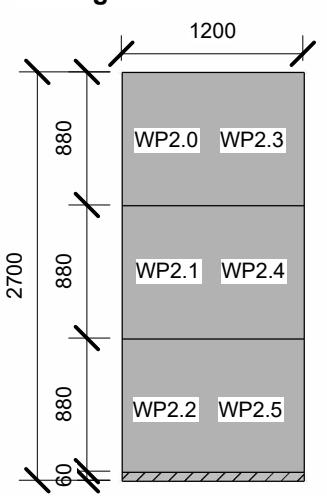
WINDBREAKER FIBRE CEMENT BOARD 9MM - PARAPET - STEP 15.1

WINDBREAKER FIBRE CEMENT BOARD 9MM - ASSEMBLY AND INFORMATION



1 C-C

Cutting list:



2x, waste 22.2%
WP2.0 - WP2.5

1x, waste 7,5%
used on another element 34,8%
WP2.0, WP1.6

used on another element: 11,5%

waste: 0,8%

Information:

Manufacturer: Cambrit
Material: Fiber cement
Type: Cembrit Windstopper Basic
Thermal conductivity: 0.34 (W/m·K)
Fire class: A2-s1, d0
Available boards dimensions:
Thickness: 9mm
Width: 1200mm
Length: 2400/2700/3000mm



Screws: NKT spun+ climate screw 4.0*30 mm
Sealing tape: Cembrit Windstopper Tape 75 mm
Collection profiles:

1. Vertical support: Cembrit 12 h rail
2. Horizontal supports: Cembrit 13 H rail

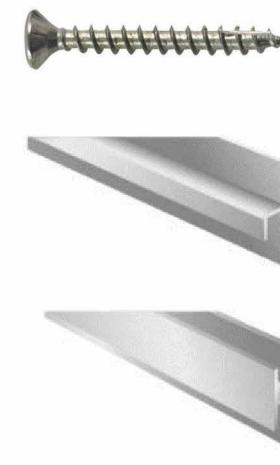
Note: Cembrit Windstopper must be installed with all edges supported.

Assembly:

Windbreaker is screwed with screws 200mm c/c on the edges and 300mm c/c inside. Boards are connected with each other with the staples 100mm c/c. The tape is mounted both over horizontal and vertical joints, also when these are mounted with profiles. The final windbreaker must be defined as tight.

The windbreaker board must be fixed according to the mounting sequence.

If it is needed to cut fibre cement board use special saw.



Quality control

Windbreaker assembly:

- Used correct board
- Mounting in correct order
- Properly fixed
- Correct dimensions
- Properly cover all insulation
- No damages on windbreaker

Name: _____ Date: _____
Signature: _____



PROJECT: Multi purpose sport hall

SUBJECT: WINDBREAKER FIBRE CEMENT BOARD 9MM -
PARAPET - STEP 15.1

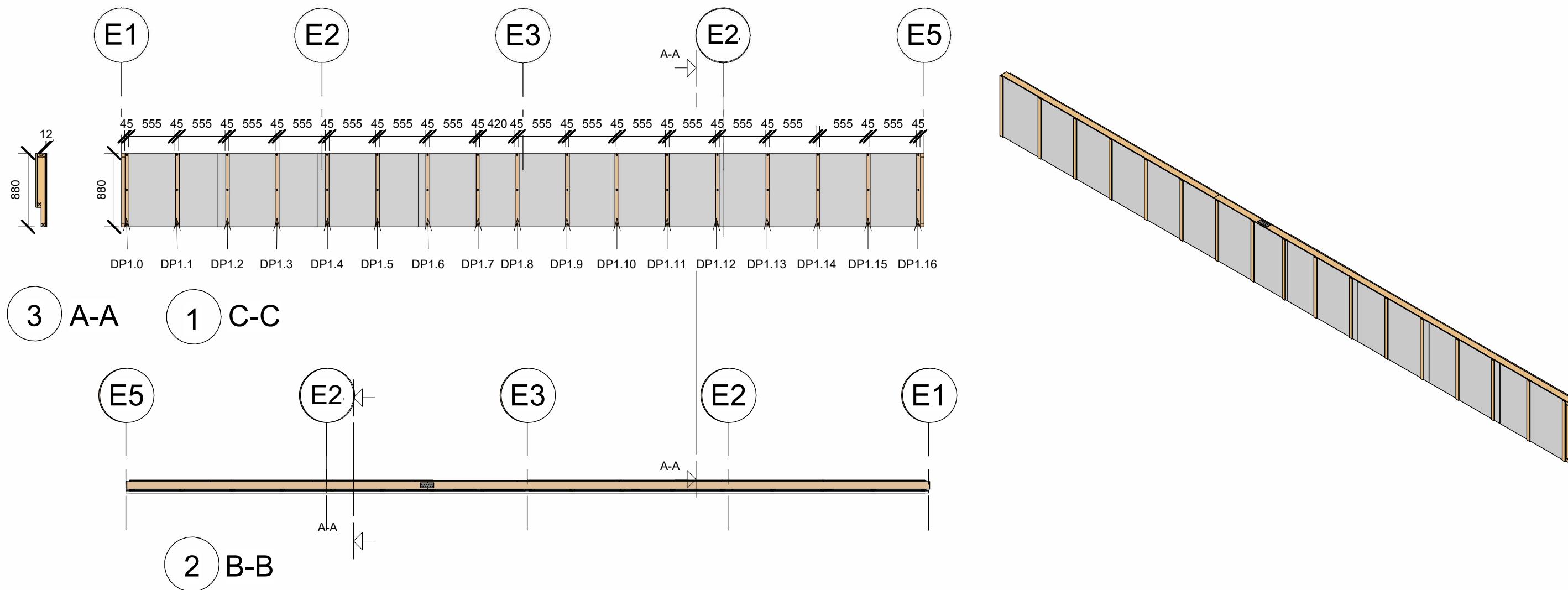
DRAWN BY: Abigail Goodman

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VIA >

DISTANCE STRIP 12MM X 45MM - PARAPET - STEP 16

DISTANCE STRIP 12MM X 45MM - ELEMENT VISUALISATION



Horizontal batten		
Type	Length	Count
12x45 mm timber	880	17

Mounting sequence

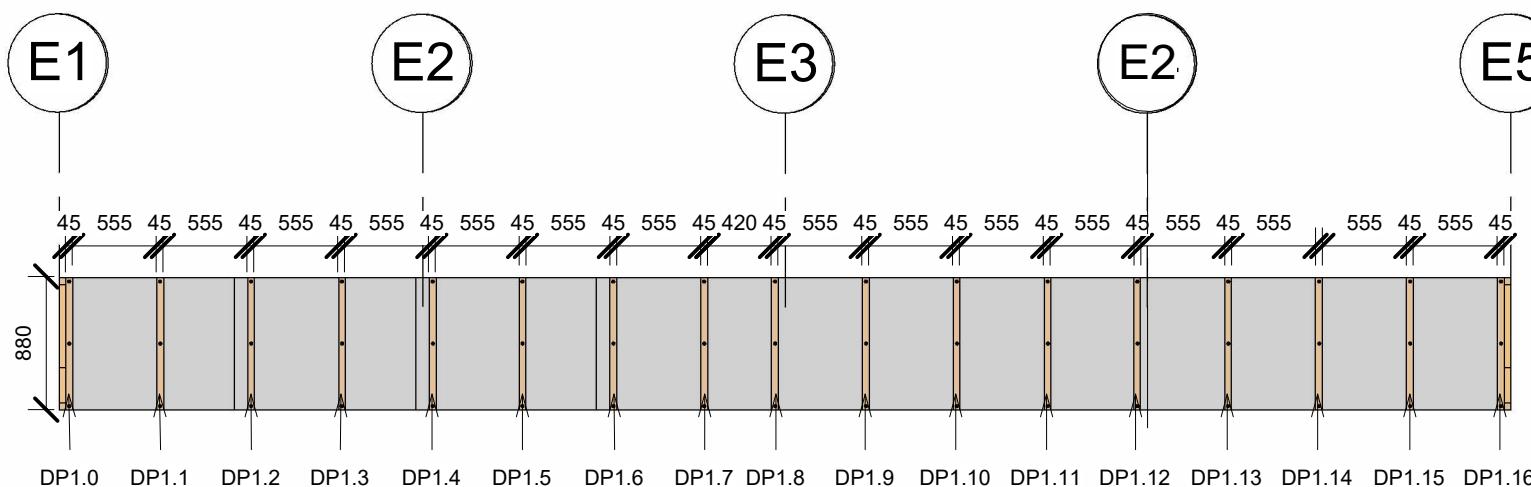
- 1. DP1.0 9. DP1.8
- 2. DP1.1 10. DP1.9
- 3. DP1.2 11. DP1.10
- 4. DP1.3 12. DP1.11
- 5. DP1.4 13. DP1.12
- 6. DP1.5 14. DP1.13
- 7. DP1.6 15. DP1.14
- 8. DP1.7 16. DP1.15
- 17. DP1.16

Parapet specification:

- 1. 2-layers of bitumen felt
- 2. 15mm OSB boards
- 3. 90mm Glass wool insulation
- 4. 45x90mm Wooden stud
- 5. 9mm Wind barrier – Fiber cement
- 6. 12mm c/c 600mm Distance strip
- 7. 25x45 Horizontal Batten
- 8. 21mm Wooden cladding

DISTANCE STRIP 12MM X 45MM - PARAPET 1 STEP 16.1

DISTANCE STRIP 12MM X 45MM - ASSEMBLY AND INFORMATION



1 C-C

Information:

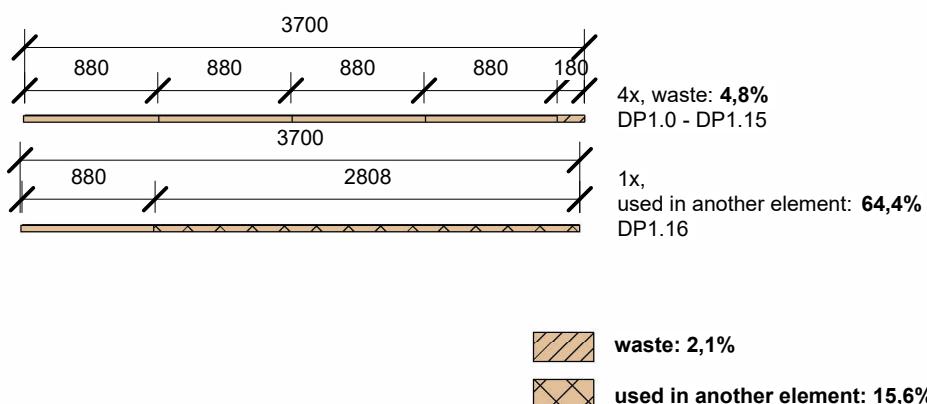
Manufacturer: DAN-WOOD Sawmill
Material: Timber
Quality: C14
Bending strength: 18Mpa
Surface: Planned

- Screws: NKT spun+ climate screw 4.0*50 mm

Assembly:

Assemble the distance strip to the windbreaker with screws in the specified sequence of assembly.

Screws should be used where the drawing specifies in order to secure the distance strip and windbreaker. Distance strip should be screwed around 450mm c/c where it is possible.

Cutting list:**Quality control**

Distance strip assembly:

- | | |
|---------------------------|--------------------------|
| Used correct strip | <input type="checkbox"/> |
| Mounting in correct order | <input type="checkbox"/> |
| Properly fixed | <input type="checkbox"/> |
| Correct dimensions | <input type="checkbox"/> |
| No damages on battens | <input type="checkbox"/> |

Name: _____ Date: _____

Singature: _____



REDDINGTON

VIA >

PROJECT: Multi purpose sport hall

DATE: 01/12/21

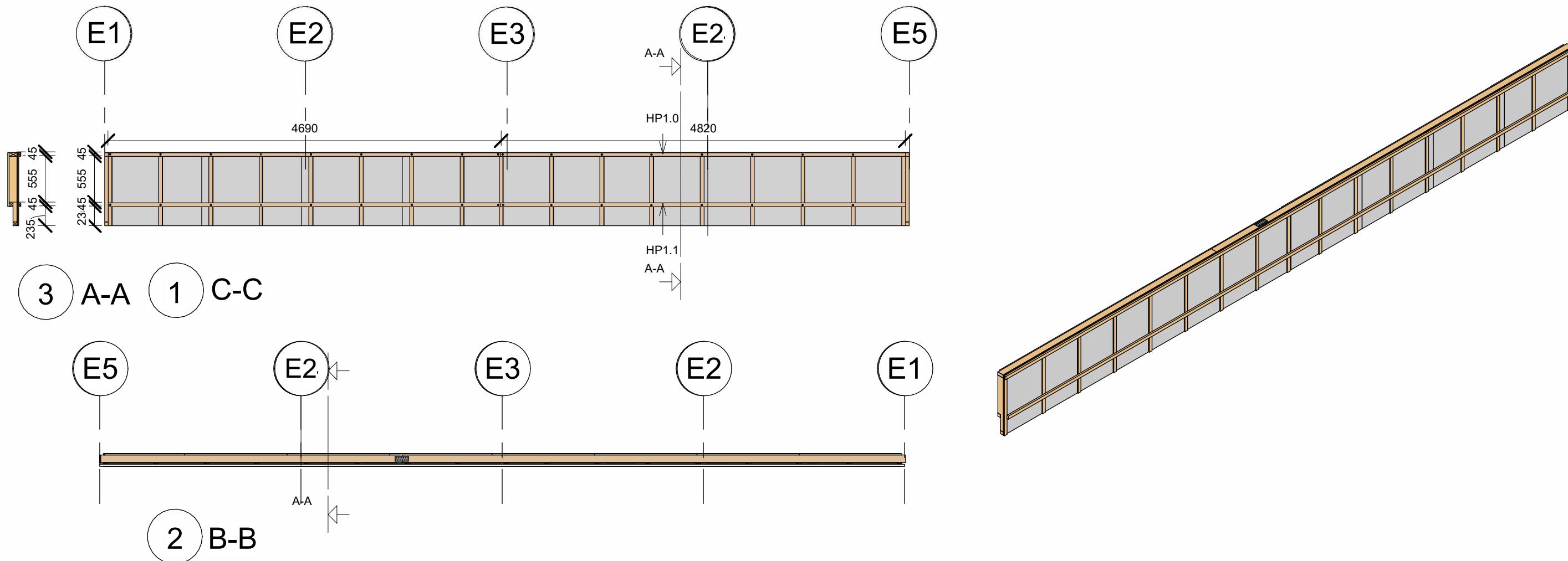
SUBJECT: DISTANCE STRIP 12MM X 45MM - STEP 9.1 Copy 1

SCALE: 1 : 50

DRAWN BY: Author

HORIZONTAL BATTENS 25MM X 45MM - PARAPET - STEP 17

HORIZONTAL BATTENS 25MM X 45MM - ELEMENT VISUALISATION



Horizontal batten		
Type	Length	Count
25x45 mm timber	4690	2
25x45 mm timber	4820	2

Mounting sequence:

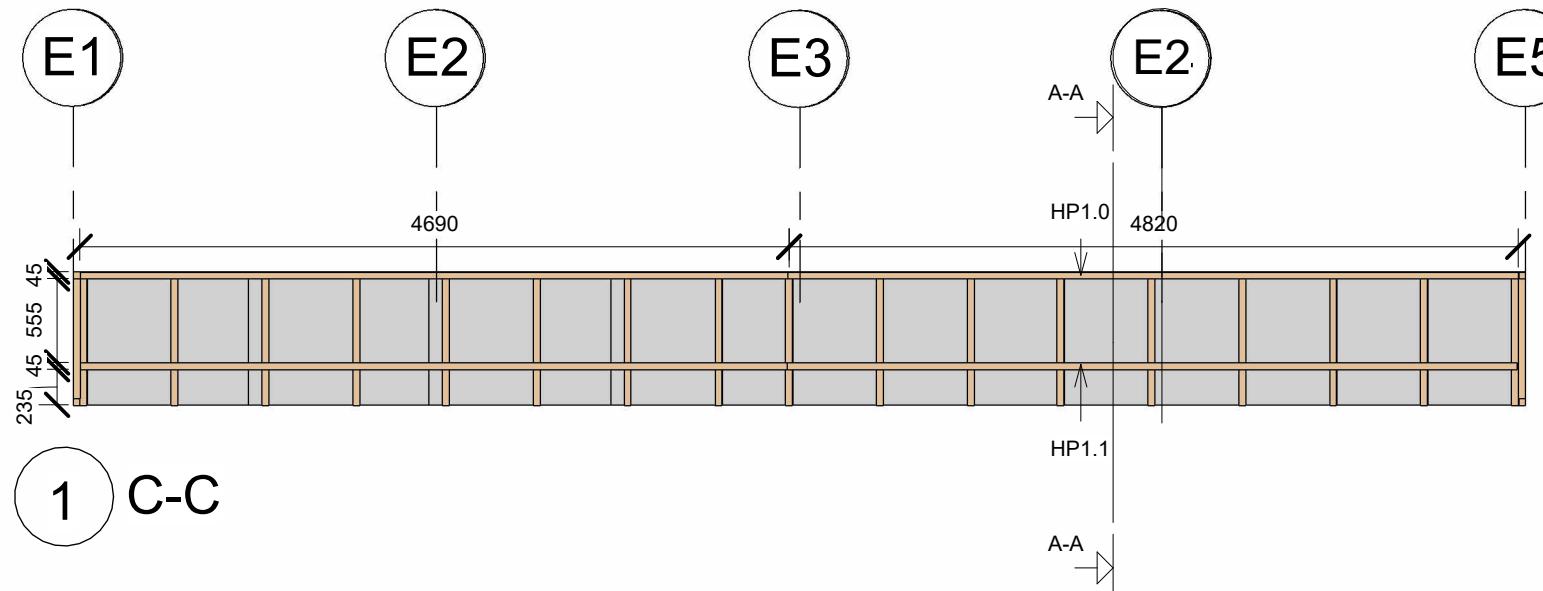
1. HP1.0
2. HP1.1

Parapet specification:

1. 2-layers of bitumen felt
2. 15mm OSB boards
3. 90mm Glass wool insulation
4. 45x90mm Wooden stud
5. 9mm Wind barrier – Fiber cement
6. 12mm c/c 600mm Distance strip
7. 25x45 Horizontal Batten
8. 21mm Wooden cladding

HORIZONTAL BATTENS 25MM X 45MM- STEP 17.1

HORIZONTAL BATTENS 25MM X 45MM - ASSEMBLY AND INFORMATION



Information:

Manufacturer: DAN-WOOD Sawmill
Material: Timber
Quality: C14
Bending strength: 18Mpa
Surface: Planned

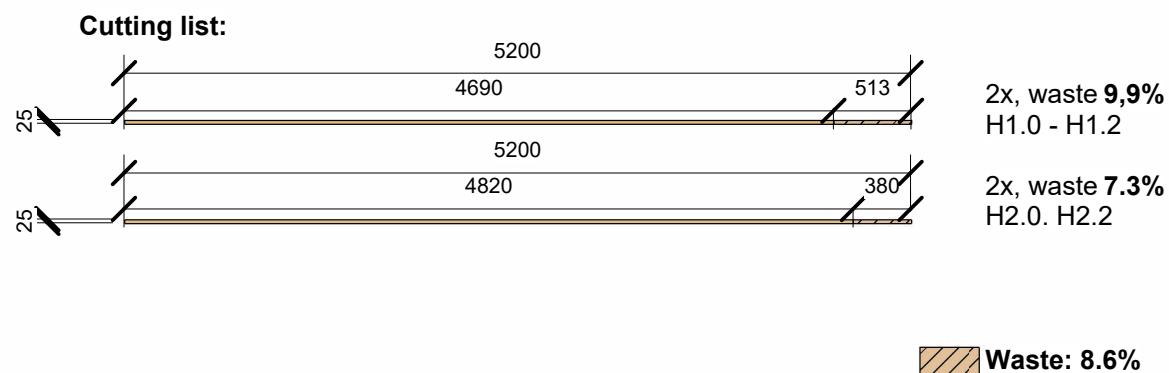
Screws: NKT spun+ universal screw 5.0*70 mm

Assembly:

Assemble the horizontal battens according to the order of assembly sequence.

Fix the horizontal battens using screws to each single distance strip.

The last horizontal battens on the bottom for the wooden cladding will be done on site.



Quality control

Horizontal battens assembly:

- Used correct strip
- Mounting in correct order
- Properly fixed
- Correct dimensions
- No damages on battens

Name: _____ Date: _____

Singature: _____



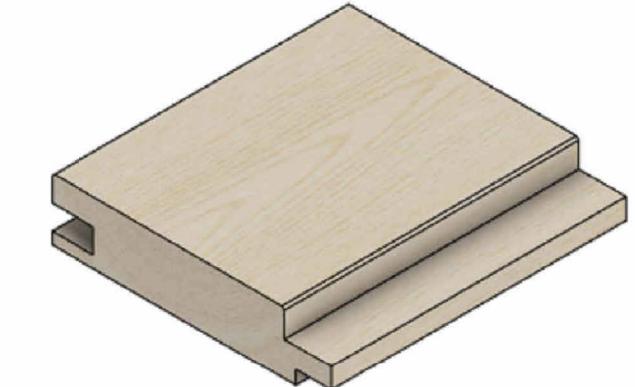
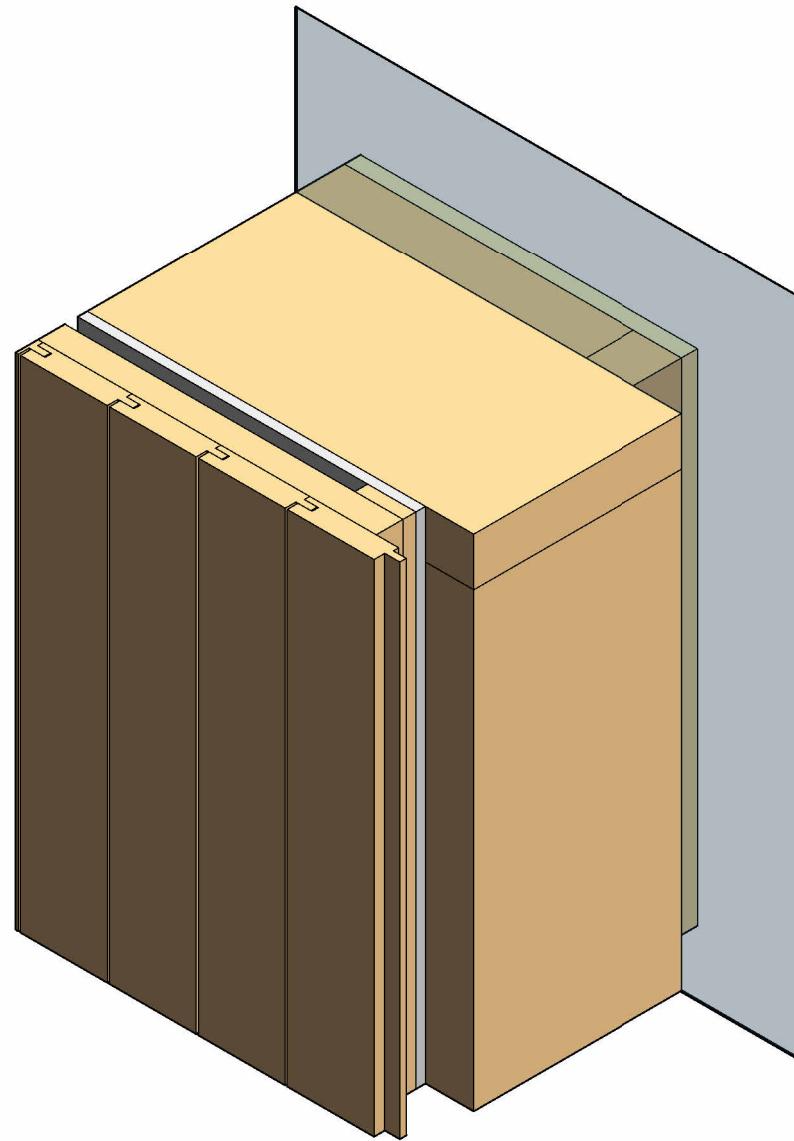
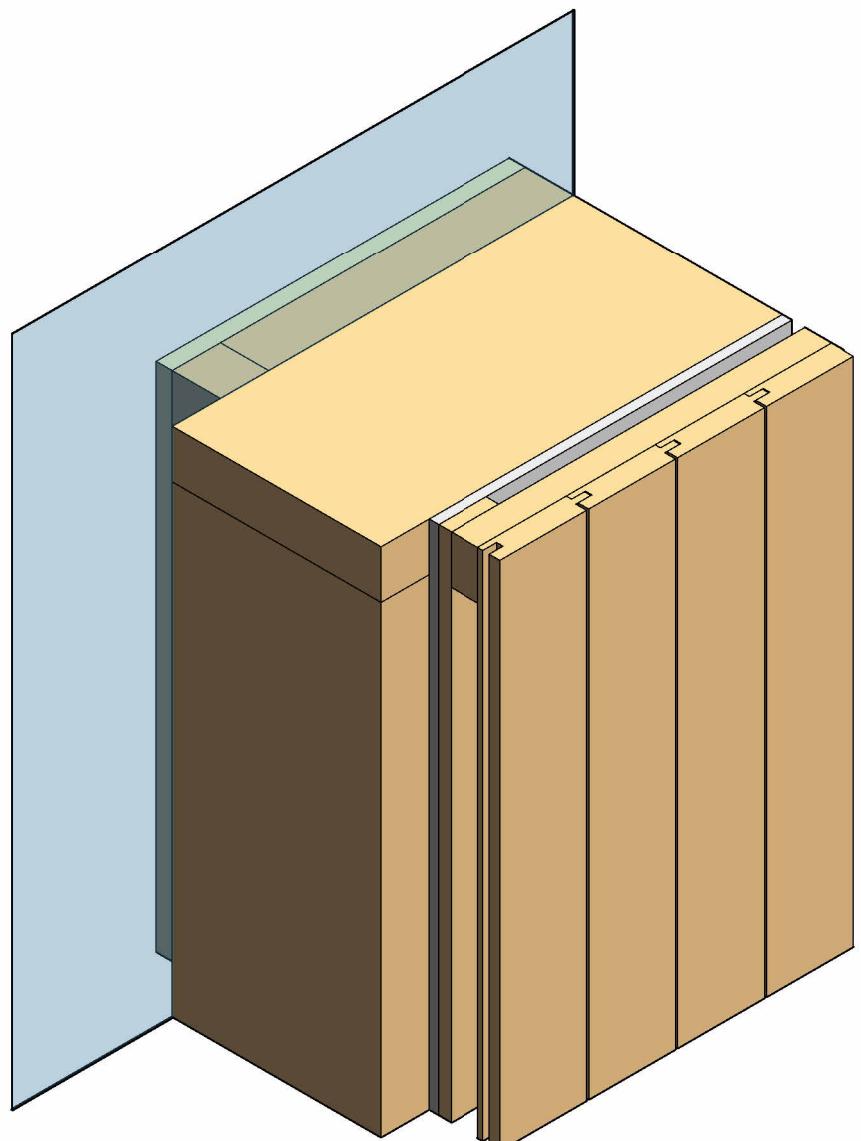
REDDINGTON

VIA

PROJECT: Multi purpose sport hall	DATE: 01/12/2023	
SUBJECT: HORIZONTAL BATTENS 25MM X 45MM- STEP 10.1		
Copy 1	SCALE: 1 : 50	
DRAWN BY: Abigail Goodman		Page 38

WOODEN CLADDING 21MM (DONE ON SITE) - STEP 18

WOODEN CLADDING - ELEMENT VISUALISATION



Information:

Manufacturer: Superwood
Material: Soft wood
Type: SW18 SKYGGE 3"
Dimensions: 95 mm X 21 mm
Screws: NKT spun+ climate screw 4.0*40 mm

Assembly:

The wooden cladding is done on site after the elements are mounted properly. The first cladding piece with the groove on one end is screwed to the horizontal battens, and then the other piece of wooden cladding with the tongue is slid into the groove of the first cladding piece and then screwed to the horizontal batten.

The cladding is not cut when an element ends as the cladding needs to be continuous, as shown in the 3d figures.

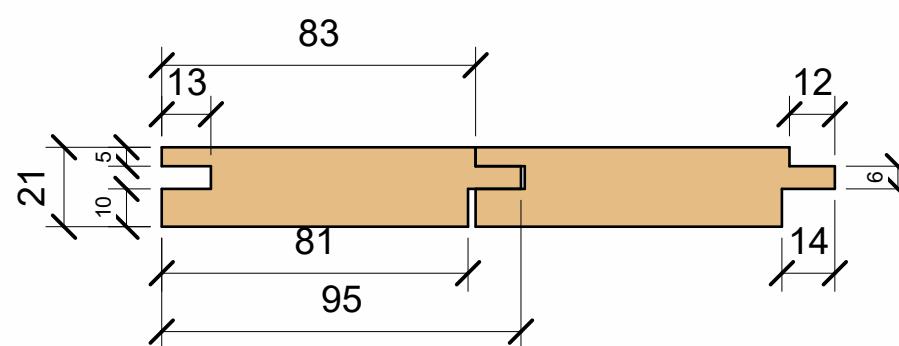
Quality control

Wooden cladding assembly:

- Used correct cladding
- Mounting in correct order
- Properly fixed
- Correct dimensions
- No damages on battens

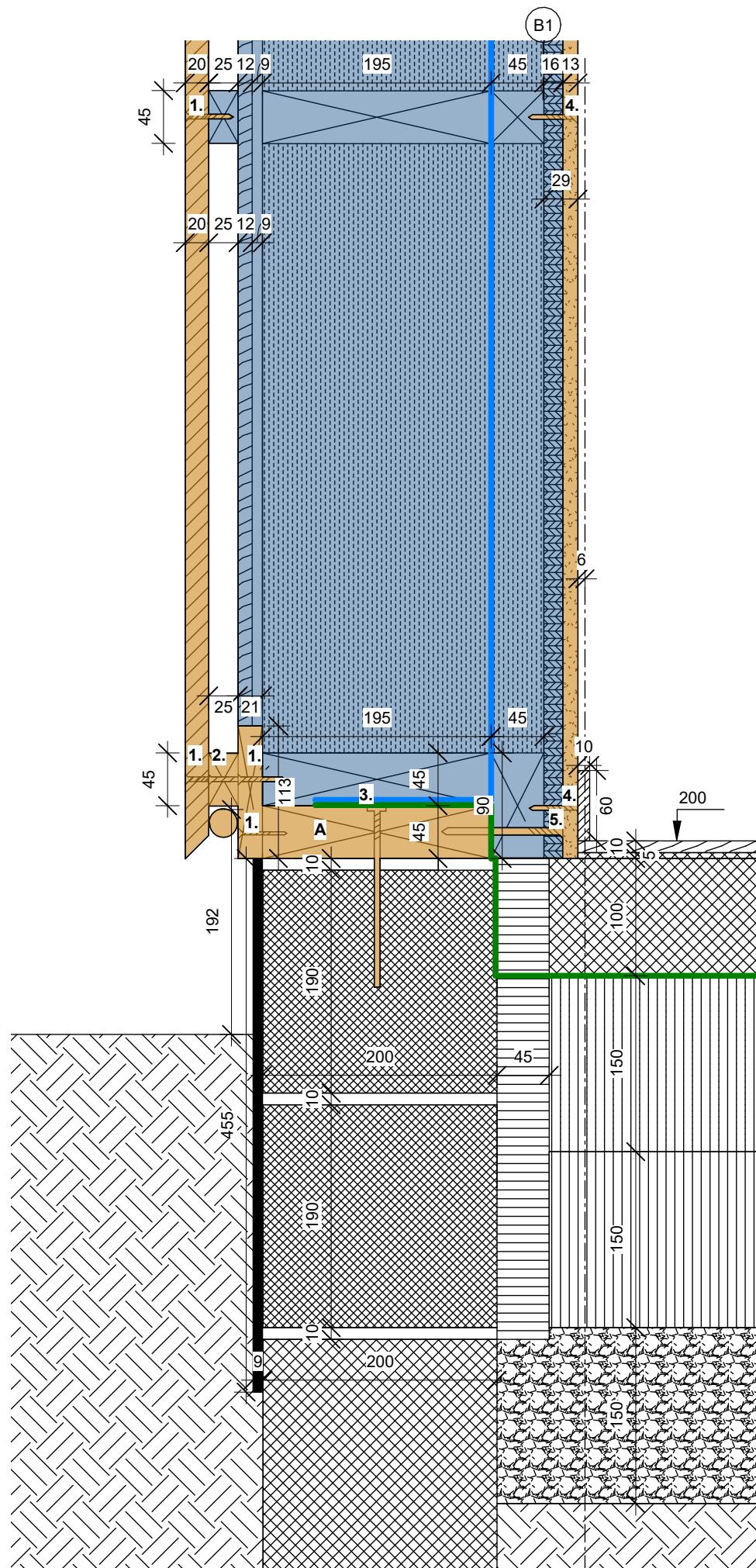
Name: _____ Date: _____

Signature: _____



PROJECT: Multi purpose sports hall	DATE: 01/12/2023	Page 39
SUBJECT: WOODEN CLADDING 21MM (DONE ON SITE)- STEP	18	
DRAWN BY: Rahul Choudhary	SCALE: 1 : 2	

DETAIL FOUNDATION



U-Value for external wooden wall:

U-Value requirement: 0,2 W/(m²K)
U-Value actual: 0,157 W/(m²K)

Fire requirements: R60 A2, s-1, d0

External wooden wall- prefabricated element:

1. 12.5mm Gypsum board REI 30
2. 15mm OSB board
3. 45x45mm c/c 600mm Batten
4. 45mm Mineral wool insulation - Glass Wool
5. 0.2mm DPM
6. 45x195mm Wooden stud
7. 195mm Mineral wool insulation - Glass wool
8. 9mm Wind barrier - Fiber cement
9. 12x45mm c/c 600mm Distance strip
10. 25x45 Batten
11. 21x95mm Wooden cladding

Wooden external wall - prefabricated element
Wooden cladding for external wall - done on the site
Gypsum for external wall - done on the site
Foundation - done on the site

Foundation specification:

1. 10 mm mortar
2. 150 x 190 mm Leca block
3. 10 mm mortar
4. 150 x 190 mm Leca block
5. 45 x 410 mm hard insulation polystyrene
6. 194 x 654 mm ground slab

Screws:

1. NKT SPUN+ CLIMATE SCREW (4.0 X 40 MM)
2. NKT SPUN+ CLIMATE SCREW (6.0 X 100 MM)
3. CHEMICAL ANCHOR M16 (18 X 125 MM) (CALCULATED BY THE ENGINEER)
4. NKT SPUN+ UNIVERSAL SCREW (4.0 X 40 MM)
5. NKT SPUN+ UNIVERSAL SCREW (6.0 X 100 MM)

U-value for the ground slab:

U-Value requirement: 0,20 W/(m²k)
U-Value actual: 0,150 W/(m²k)

Ground slab specification:

1. 10mm Wallman Laminate floor finish Oak 10 x 207 x 2200 mm
2. 5mm Screed
3. 100mm Poured concrete
4. 2mm Vapour barrier
5. 2 layers of 150mm hard insulation polystyrene
6. 1 mm radon barrier
7. 150mm Capillary layer

Assembly:

- *DPM is stapled to load bearing frame at the production factory
1. Place the sole plate (45 x 195mm) on top of the DPC, securing it to the foundation with a chemical anchor placed every 600 mm C/C.
 2. Place the DPC on top of the soleplate using adhesive.
 3. Place a batten A (21 x 113 mm) securing it with screws every 600 mm C/C through the batten. (21 x 113 mm) and into the sole plate (45 x 195 mm).
 4. Place a screw through the batten A (21 x 113 mm) and into the base plate (195 x 45 mm).
 5. Screwing through the horizontal batten (25x 45 mm) into the base plate (195 x 45 mm).
 6. Screw the OSB board through the batten (45 x 90 mm) and into the sole plate (45 x 195 mm).
 7. Once the temporary bracing has been removed screw into the horizontal batten.
 8. Once the building is closed, screw through the gypsum into the batten (45 x 90 mm).

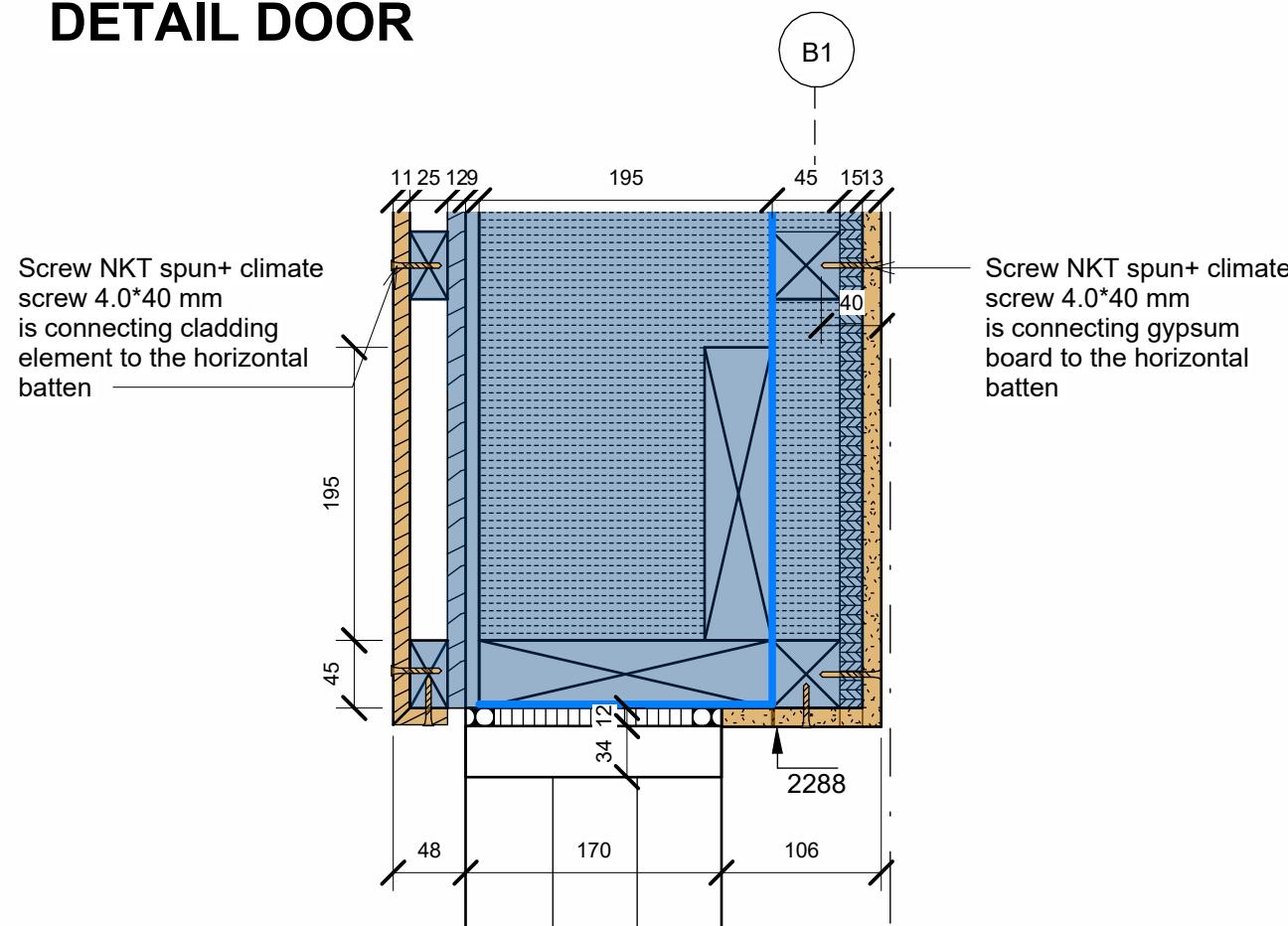
Legend:

	Prefabricated element		Mortar		DPM
	Done on site		Concrete		DPC
	Wood / wood on site		Capillary breaking layer (gravel)		Modular line
	OSB board		Rendering		Elevation level
	Mineral wool		Polystyrene		Snow tube
	Windbreaker		Earth		Screw
					Plaster

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PROJECT: Multi purpose sports hall	DATE: 01/12/2023	Page 40
SUBJECT: Detail - foundation		
DRAWN BY: Abigail Goodman	SCALE: 1 : 5	

DETAIL DOOR



U-Value for external wooden wall:

U-Value requirement: 0,2 W/(m²K)
U-Value actual: 0,157 W/(m²K)

Fire requirements: R60 A2, s-1, d0

External wooden wall- prefabricated element:

1. 12.5mm Gypsum board REI 30
2. 15mm OSB board
3. 45x45mm c/c 600mm Batten
4. 45mm Mineral wool insulation - Glass Wool
5. 0.2mm DPM
6. 45x195mm Wooden stud
7. 195mm Mineral wool insulation - Glass wool
8. 9mm Wind barrier - Fiber cement
9. 12x45mm c/c 600mm Distance strip
10. 25x45 Batten
11. 21x95mm Wooden cladding

Wooden external wall - prefabricated element

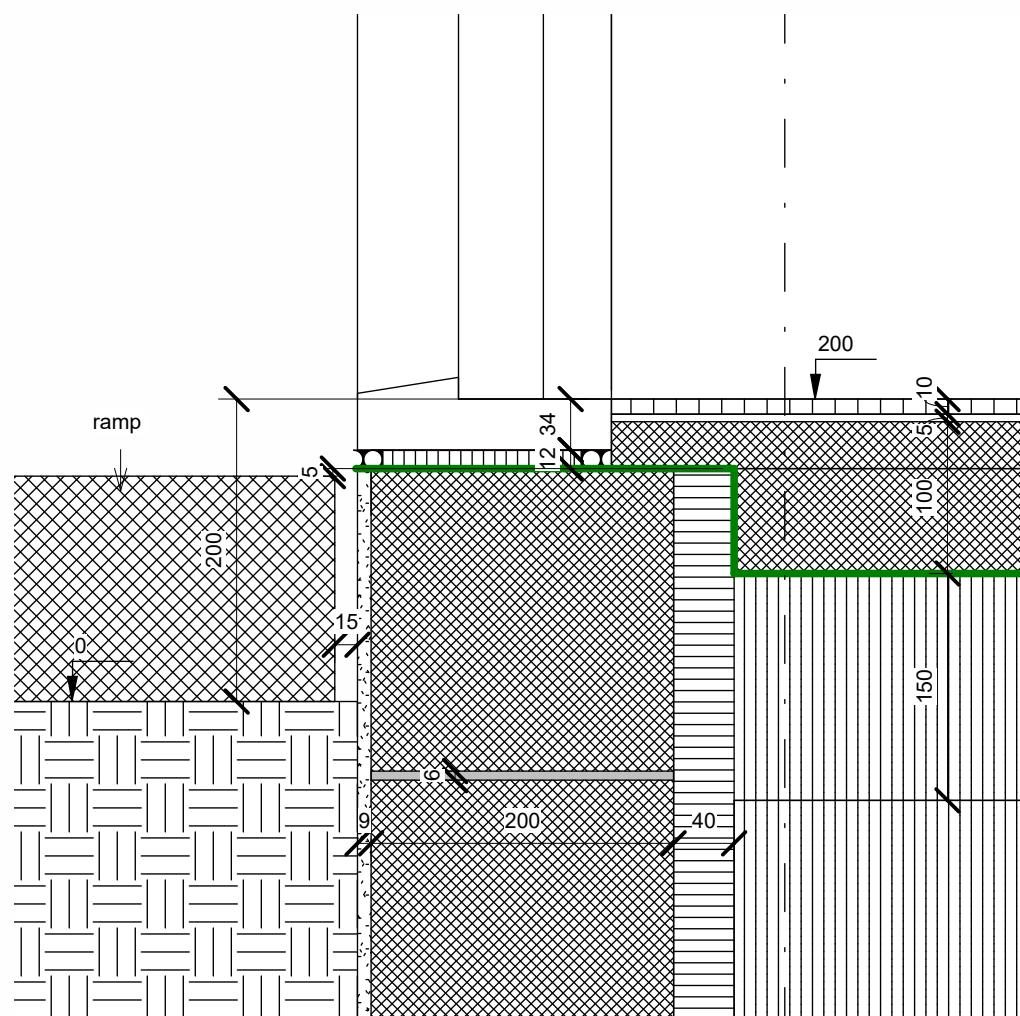
Wooden cladding for external wall - done on the site

Ground slab specification:

1. 10mm Wallman Laminate floor finish Oak 10 x 207 x 2200 mm
2. 5mm Screed
3. 100mm Poured concrete
4. 2mm Vapour barrier
5. 2 layers of 150mm hard insulation polystyrene
6. 150mm Capillary layer

Assembly:

- * DPM is stapled to the load bearing frame at the production factory
- 1. Before fixing the door, ensure the DPM is secured along the load bearing stud with staples.
- 2. Mount the door frame.
- 3. Secure the door frame with a (mastic sealant).
- 4. Fix the snow catcher in between the distance strip. (note: cannot see in the view)
- 5. Fix the cover for the bottom of horizontal batten with the piece of wooden cladding.
- 6. After placing the door, place the drain in the ground.
- 7. Next mount the gypsum board with screws



Legend:

	Prefabricated element
	Done on site
	Wood / wood on site
	OSB board
	Mineral wool
	Polystyrene
	Windbreaker
	Bitumen felt
	Plaster
	DPM
	DPC
	Modular line
	Elevation level

PROJECT: Multi purpose sports hall

DATE: 01/12/21

SUBJECT: Detail - door

SCALE: 1 : 5

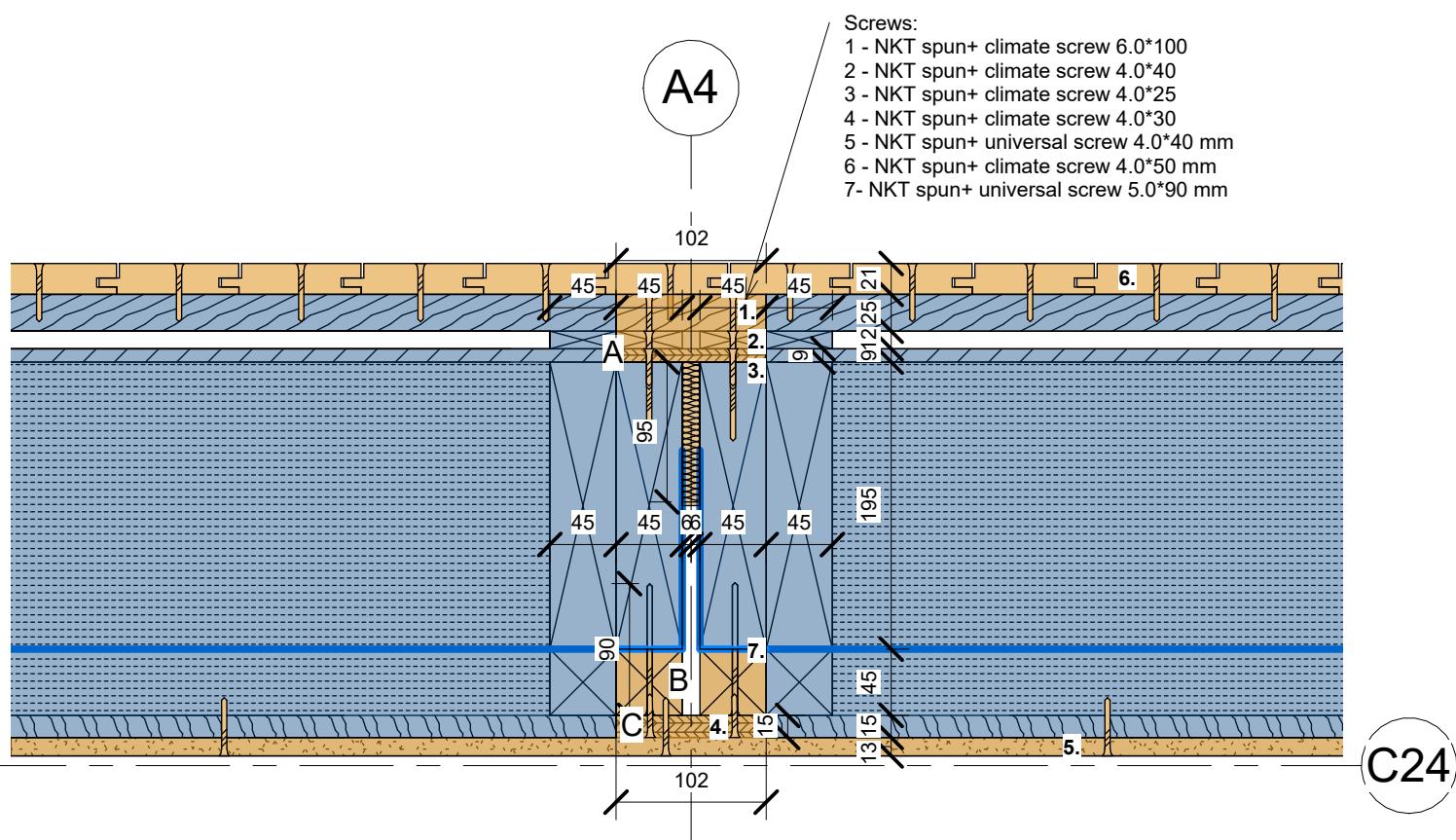
DRAWN BY: Anna Greczylo

REDDINGTON

VIA >

DETAIL CONNECTION SIDE BY SIDE

* DPM & ISOVER Tæt is stapled to loadbearing frame at the production factory



Legend:

	OSB board		Gypsum boards		Done on site
	Mineral wool		Prefabricated		
	Wooden battens		Wood in section		
	Plywood		DPM		
	Windbreaker		Modular line		

Assembly:

- Mount the two elements side by side according to the modular lines
- Support them by using temporary bracings
- Make sure the ISOVER Tæt is placed correctly between the elements
- Fix the piece of plywood A between the two walls and screw it to the load bearing frame (screw 3)
- Fix the distance strips and counter battens between the two walls (screw 1&2)
- Fix the timber pieces B to the loadbearing frame (screw 7)
- Fix the plywood C between two walls to the loadbearing frame (screw 4)
- Once the temporary bracing has been removed, assemble the external cladding and screw it into the horizontal battens (screw 2)
- Once the building has been closed, mount the gypsum boards by fixing them to the OSB boards (screw 3)

Isover Tæt:

Manufacturer: Isover
Material: Mineral wool
Standard size: 20x95x10000mm
Solution for joints made of glass wool and wrapped in black plastic foil with high air and diffusion resistance



U-Value for external wooden wall:

U-Value requirement: 0,2 W/(m²K)
U-Value actual: 0,157 W/(m²K)

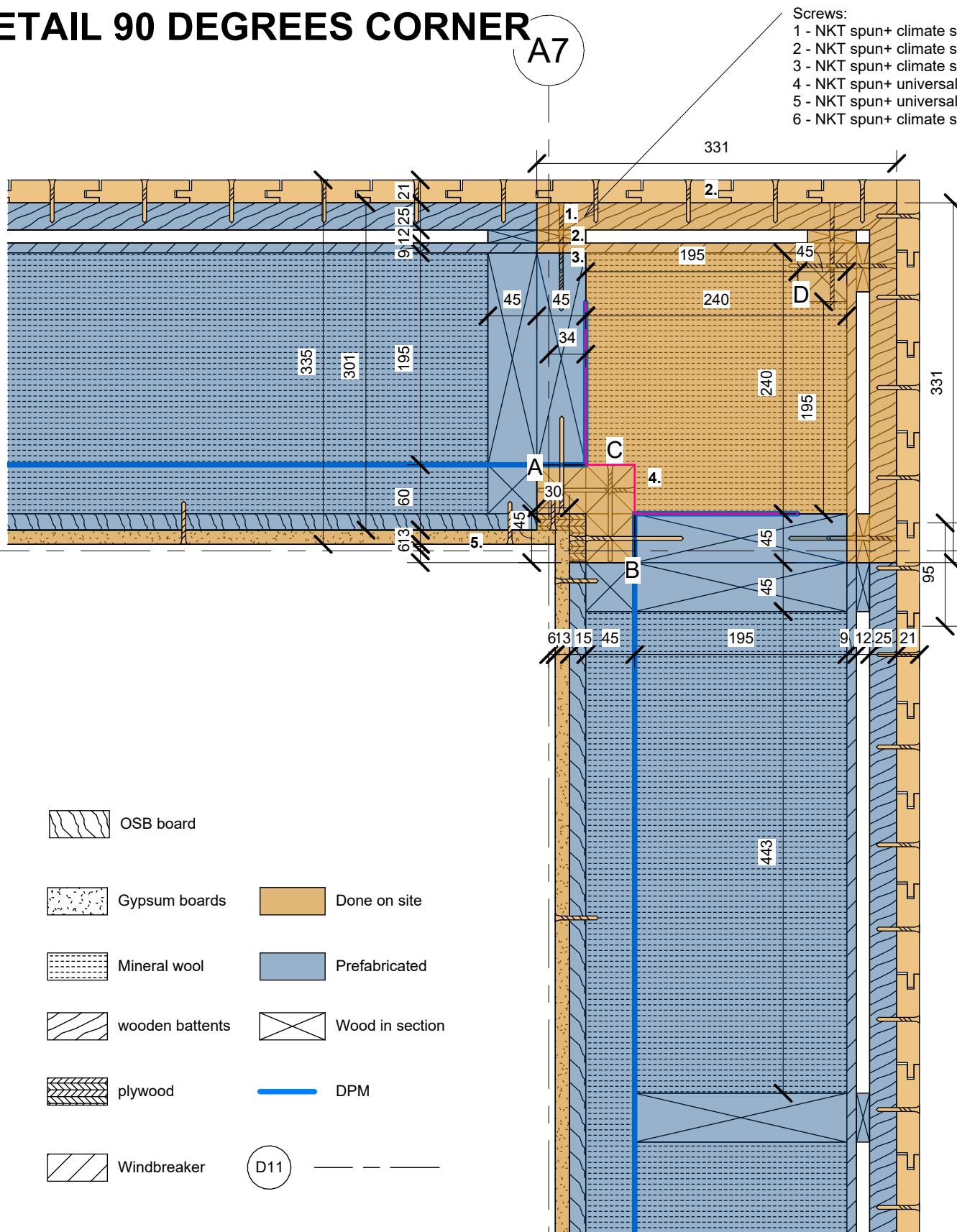
Fire requirements: R60 A2, s-1, d0

External wooden wall- prefabricated element:

- 12.5mm Gypsum board REI 30
- 15mm OSB board
- 45x45mm c/c 600mm Batten
- 45mm Mineral wool insulation - Glass Wool
- 0.2mm DPM
- 45x195mm Wooden stud
- 195mm Mineral wool insulation - Glass wool
- 9mm Wind barrier - Fiber cement
- 12x45mm c/c 600mm Distance strip
- 25x45 Batten
- 21x95mm Wooden cladding

Wooden external wall - prefabricated element
Wooden cladding for external wall - done on the site

DETAIL 90 DEGREES CORNER



* DPM & ISOVER Tæt is stapled to loadbearing frame at the production factory

Assembly:

1. Mount the two elements side by side according to the modular lines
2. Support them by using temporary bracings
3. Screw stud A to the loadbearing frames (screw 4)
4. Screw stud B to the loadbearing frames (screw 4)
5. Screw stud C to the studs A&B (screw 4)
6. Overlap DPM with another piece of DMP to cover the stud C and finish it by adding DAFA tape
7. Fix the windbreaker between the two walls and screw it in the load bearing frame and batten D (screw 4)
- *Screw the wind breaker to the lasdbearing frame, then screw to batten D (while holding the batten)
8. Fill the cavity with glass wool
9. Fix the distance strips to the load bearing stud & stud D, then fix horizontal battens to the load bearing stud & stud D (screw 2,1)
10. Fix the OSB board to the non loadbearing frame (screw 5)
11. Once the temporary bracing has been removed, assemble the external cladding and screw it into the horizontal battens (screw 2)
12. Once the building has been closed, mount the gypsum boards to the non loadbearing frame (screw 5)

U-Value for external wooden wall:

U-Value requirement: 0,2 W/(m²K)
U-Value actual: 0,157 W/(m²K)

Fire requirements: R60 A2, s-1, d0

External wooden wall- prefabricated element:

1. 12.5mm Gypsum board REI 30
2. 15mm OSB board
3. 45x45mm c/c 600mm Batten
4. 45mm Mineral wool insulation - Glass Wool
5. 0.2mm DPM
6. 45x195mm Wooden stud
7. 195mm Mineral wool insulation - Glass wool
8. 9mm Wind barrier - Fiber cement
9. 12x45mm c/c 600mm Distance strip
10. 25x45 Batten
11. 21x95mm Wooden cladding

Wooden cladding for external wall - done on the site

REDDINGTON

VIA

PROJECT: Multi purpos sport hall	DATE: 01/12/23	
SUBJECT:Detail - 90 degrees corner		
DRAWN BY: Anna Kurek	SCALE: 1 : 5	

WOODEN CORNER 155 DEGREES

*DPM is stapled to the load bearing frame at the production factory

Assembly:

1. Mount the two elements side by side at the correct angle according to the modular lines
2. Support them by using temporary bracings
3. Cut two pieces of DPM on site with width of 250mm and 280mm
4. Secure one end of both of the two pieces of DPM to the load bearing studs
5. Add the insulation between the two elements.
6. Overlap the other end of the two pieces of DPM and secure the longer piece to the load bearing stud with staples and finish it by adding the DAFA tape.
7. Fix the piece of angled timber piece A between the two wall elements by screwing it to the load bearing frame
8. Fix the piece of angled timber B between the two wall elements by screwing it to the load bearing frame
9. Fix the two timber pieces next to timber B by screwing them to the load bearing frame
10. Fix the batten pieces between the two wall elements by screwing them to the angled timber piece B
11. Fix the plywood between two walls by screwing it to the angled timber piece A
12. Once the temporary bracing has been removed, assemble the external cladding and screw it into the horizontal battens
13. Once the building is closed, mount the gypsum boards by fixing them to the OSB boards

U-Value for external wooden wall:

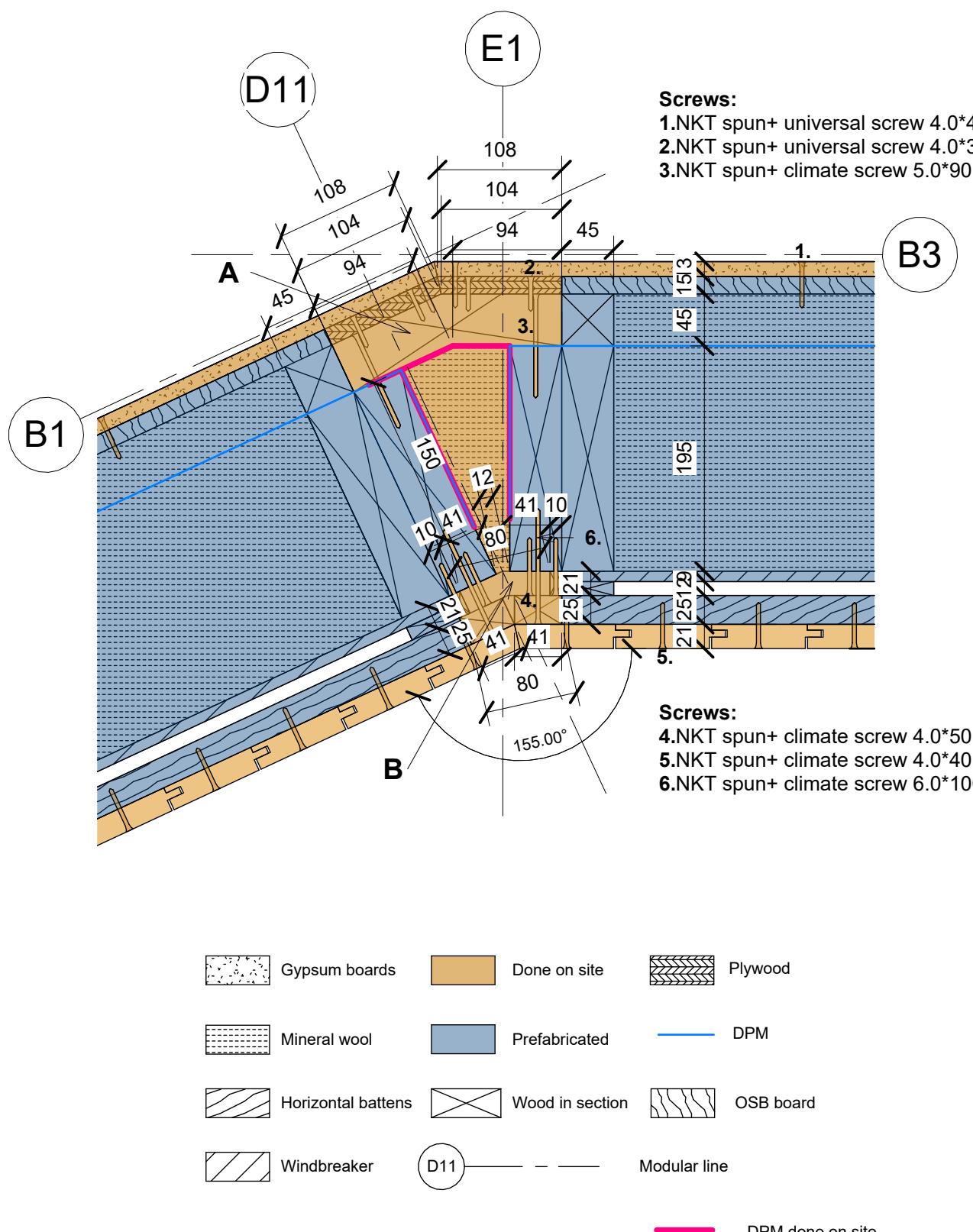
U-Value requirement: 0,2 W/(m²K)
U-Value actual: 0,157 W/(m²K)

Fire requirements: R60 A2, s-1, d0

External wooden wall- prefabricated element:

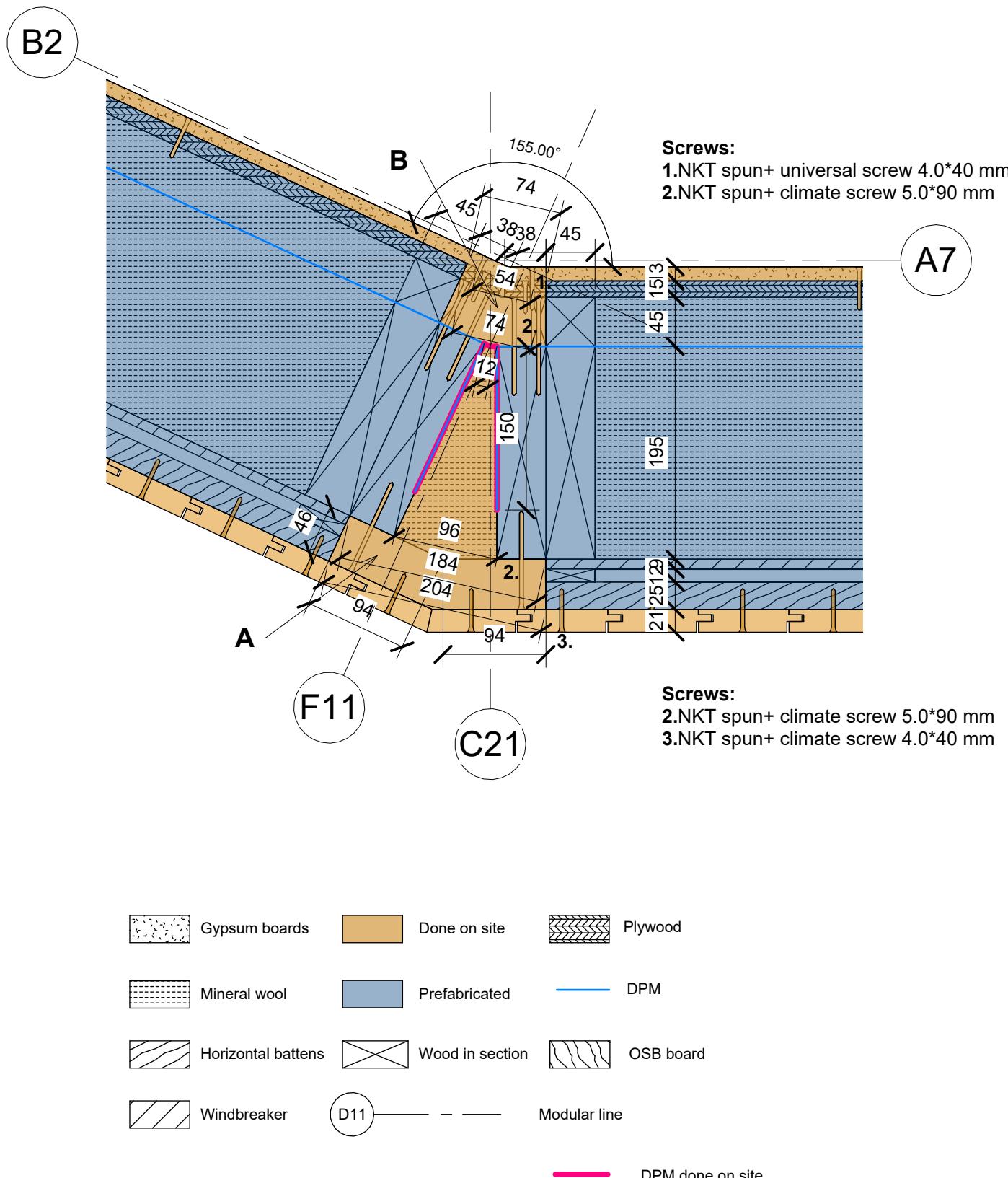
1. 12.5mm Gypsum board REI 30
2. 15mm OSB board
3. 45x45mm c/c 600mm Batten
4. 45mm Mineral wool insulation - Glass Wool
5. 0.2mm DPM
6. 45x195mm Wooden stud
7. 195mm Mineral wool insulation - Glass wool
8. 9mm Wind barrier - Fiber cement
9. 12x45mm c/c 600mm Distance strip
10. 25x45 Batten
11. 21x95mm Wooden cladding

Wooden external wall - prefabricated element
Wooden cladding for external wall - done on the site
Gypsum board for the wall element - done on the site



WOODEN CORNER 205 DEGREES

*DPM is stapled to the load bearing frame at the production factory



Assembly:

- Mount the two elements side by side at the correct angle according to the modular lines
- Support them by using temporary bracings
- Add a piece of DPM between the walls and secure it to both of the load bearing studs using staples, and then finish it with DAFA tape
- Add the piece of insulation between the walls
- Fix the piece of angled timber piece A between the two wall elements by screwing it to the load bearing frame
- Fix the piece of angled timber B between the two wall elements by screwing it to the load bearing frame
- Fix the two timber pieces next to timber B by screwing them to the load bearing frame
- Fix the plywood between two walls by screwing it to the angled timber piece B
- Once the temporary bracing has been removed, assemble the external cladding and screw it into the horizontal battens and the angled timber piece A
- Once the building is closed, mount the gypsum boards by fixing them to the OSB boards

U-Value for external wooden wall:

U-Value requirement: 0,2 W/(m²K)
U-Value actual: 0,157 W/(m²K)

Fire requirements: R60 A2, s-1, d0

External wooden wall- prefabricated element:

- 12.5mm Gypsum board REI 30
- 15mm OSB board
- 45x45mm c/c 600mm Batten
- 45mm Mineral wool insulation - Glass Wool
- 0.2mm DPM
- 45x195mm Wooden stud
- 195mm Mineral wool insulation - Glass wool
- 9mm Wind barrier - Fiber cement
- 12x45mm c/c 600mm Distance strip
- 25x45 Batten
- 21x95mm Wooden cladding

Wooden external wall - prefabricated element
Wooden cladding for external wall - done on the site
Gypsum board for the wall element - done on the site

