

# The JUWO Evolved SmartWall™

## Standard Detailing

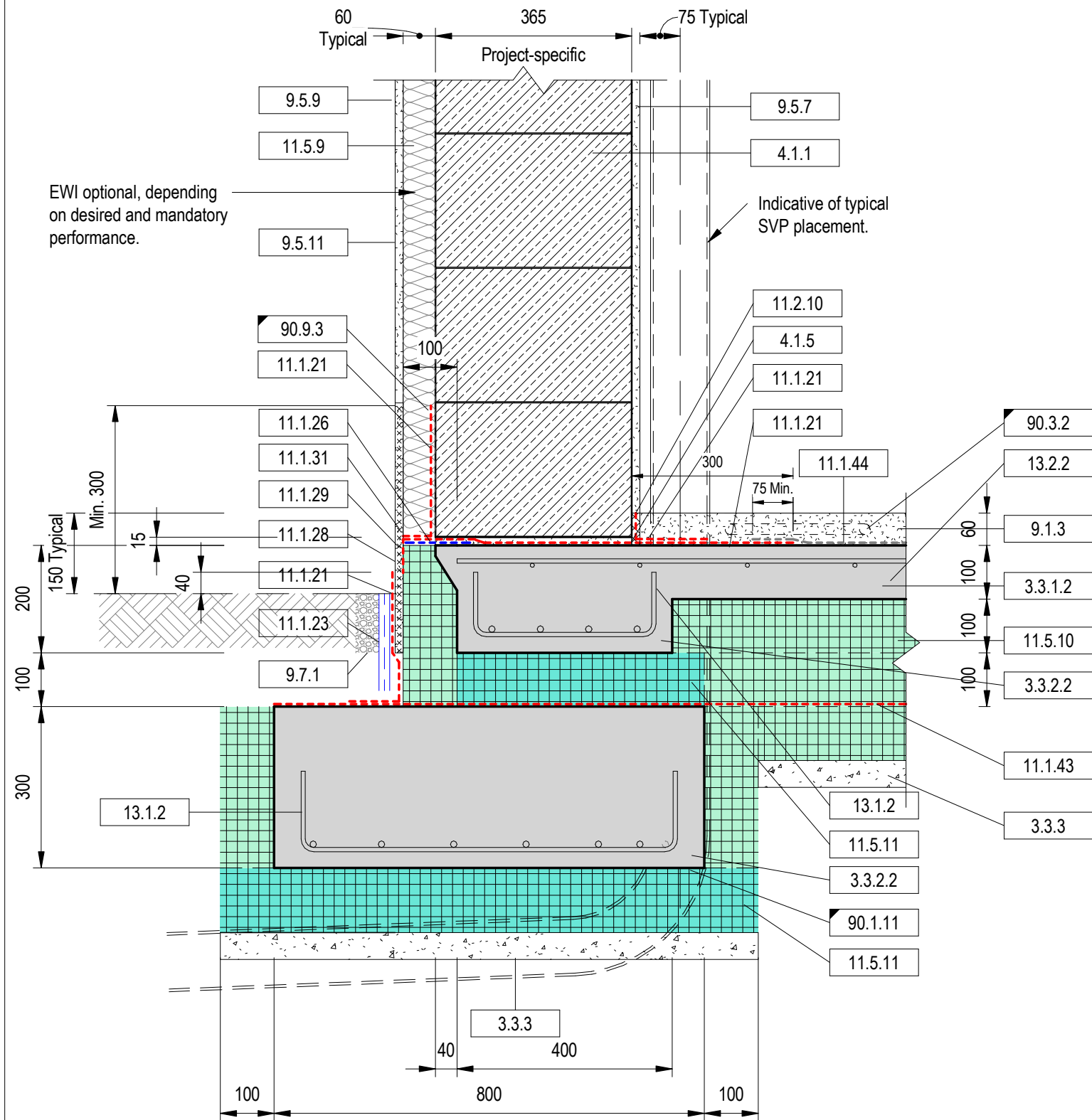


**EVOLVED  
SMARTWALL™**

## The JUWO Evolved SmartWall™ Thermoplan Clayblock System

**Monolithic Clay Block Building System**

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.



Key	Keynote
3.3.1.2	Concrete Grade RC30/37.
3.3.2.2	Concrete Grade RC30/37.
3.3.3	Lean concrete blinding and filling to BS8500, subject to site conditions.
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
4.1.5	Full thickness bed or leveling bed of insulating mortar,
9.1.3	Liquid self compacting concrete screed, Cemfloor Therm or equivalent. Apply in strict accordance with manufacturer's instructions. Provide all necessary movement joints and joint covers.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
9.5.11	External decorative finishes as desired. Ensure materials are compatible with render system.
9.7.1	Anti-splash shingle strip.
11.1.21	Waterproofing and Radon-resistant membrane, Remmers MB2K (Art. 301408).
11.1.23	Protective and decoupling sheet, Remmers DS Protect (Art. 082301)
11.1.26	Sealing tape, Remmers Tape VF120 (Art. 507101)
11.1.28	Cementing mortar, Remmers VM Fill (Art. 051725)
11.1.29	Rapid setting adhesive felting mortar, Remmers VM Fill Rapid (Art. 051925)
11.1.31	Mesh render reinforcement, Remmers Tex.
11.1.43	Generic HDPE membrane 500g
11.1.44	Visqueen GR SAM self-adhesive DPM and radon membrane for applied in accordance with manufacturer's instructions and minimum lap. Compliant with BS 8102 & BS 8485.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.9	Expanded polystyrene batts or boards.
11.5.10	Expanded polystyrene, Grade EPS200, batts, slabs or boards for foundations.
11.5.11	Expanded polystyrene, Grade EPS300, batts, slabs or boards for foundations.
13.1.2	Reinforcement Grade B500B or C.
13.2.2	Flying end mesh fabric Grade B500A, B or C
90.1.11	Displace reinforcement around penetration (pipes etc.) if necessary. Prefer re-routing of pipes. Thicken section if necessary or if detailed. Provide additional reinforcement as necessary or detailed.
90.3.2	Lay heating system pipework in floor.
90.9.3	Remmers DPM/DPC system in strict accordance with manufacturer's instructions: Carefully remove sharp edges and smooth all arrises. Clean surfaces and control suction with clean water. Scrape off projections. Prime with Remmers Kiesol MB. Fill irregularities and caulk with Remmers WP DS Level mortar/grout to produce smooth surfaces. Form fillets similarly. Apply first coat of Remmers MB2K. Apply Remmers Tape VF to all internal and external corners and joints, embedded in a layer of Remmers MB2K while still wet (B240 tape at movement joints). Apply second coat of Remmers MB2K. Attach thermal insulation (if present) with MB2K. Apply Remmers DS Protect protection.

Rev	Description	Date
1	Initial release.	14/7/2020
2	DPC/DPM details revised to Remmers system.	18/3/2021
3	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED  
SMARTWALL™**



EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

TITLE  
**WALL BASE DETAIL ON AFT FOUNDATION**

CLIENT

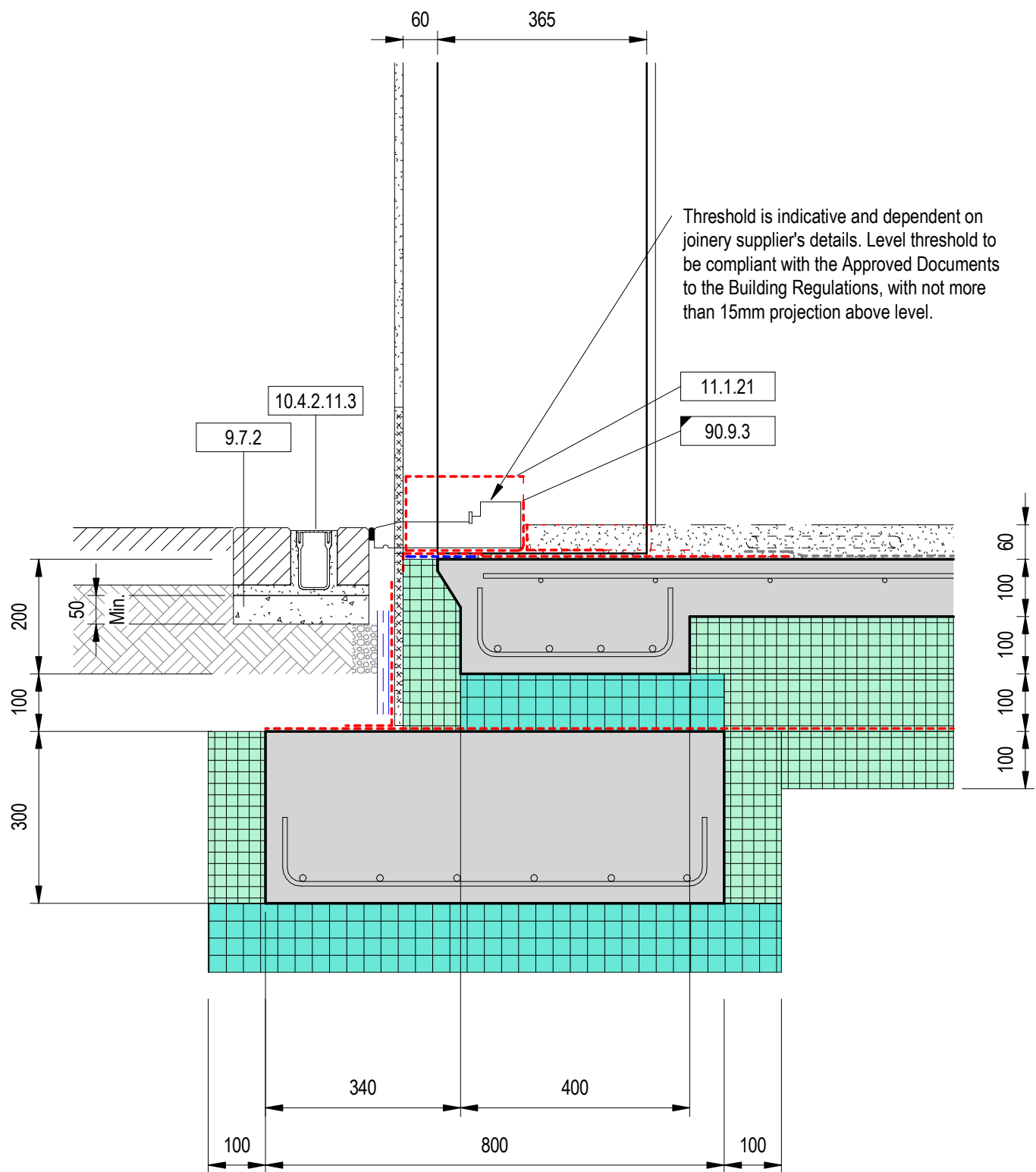
DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 101</b>	REV <b>3</b>
--	-----------------

# 1 WALL BASE ON AFT FOUNDATION

1 : 10



SEE GENERAL DETAILS AND SUPPLIERS' INSTRUCTIONS FOR DPM AND DPC GENERALLY.

Key	Keynote
9.7.2	Mass concrete beds and surrounds, concrete Grade GEN3 to BS 8500.
10.4.2.11.3	ACO Threshold Drain with connection to SW system.
11.1.21	Waterproofing and Radon-resistant membrane, Remmers MB2K (Art. 301408).
90.9.3	Remmers DPM/DPC system in strict accordance with manufacturer's instructions: Carefully remove sharp edges and smooth all arisses. Clean surfaces and control suction with clean water. Scrape off projections. Prime with Remmers Kiesol MB. Fill irregularities and caulk with Remmers WP DS Level mortar/grout to produce smooth surfaces. Form fillets similarly. Apply first coat of Remmers MB2K. Apply Remmers Tape VF to all internal and external corners and joints, embedded in a layer of Remmers MB2K while still wet (B240 tape at movement joints). Apply second coat of Remmers MB2K. Attach thermal insulation (if present) with MB2K. Apply Remmers DS Protect protection.

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Rev	Description	Date
1	Initial release.	14/7/2020
2	DPC/DPM details revised to Remmers system.	18/3/2021
3	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------

EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
SMARTWALL - TYPICAL DETAILS

TITLE  
LEVEL THRESHOLD DETAIL ON AFT FOUNDATION

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

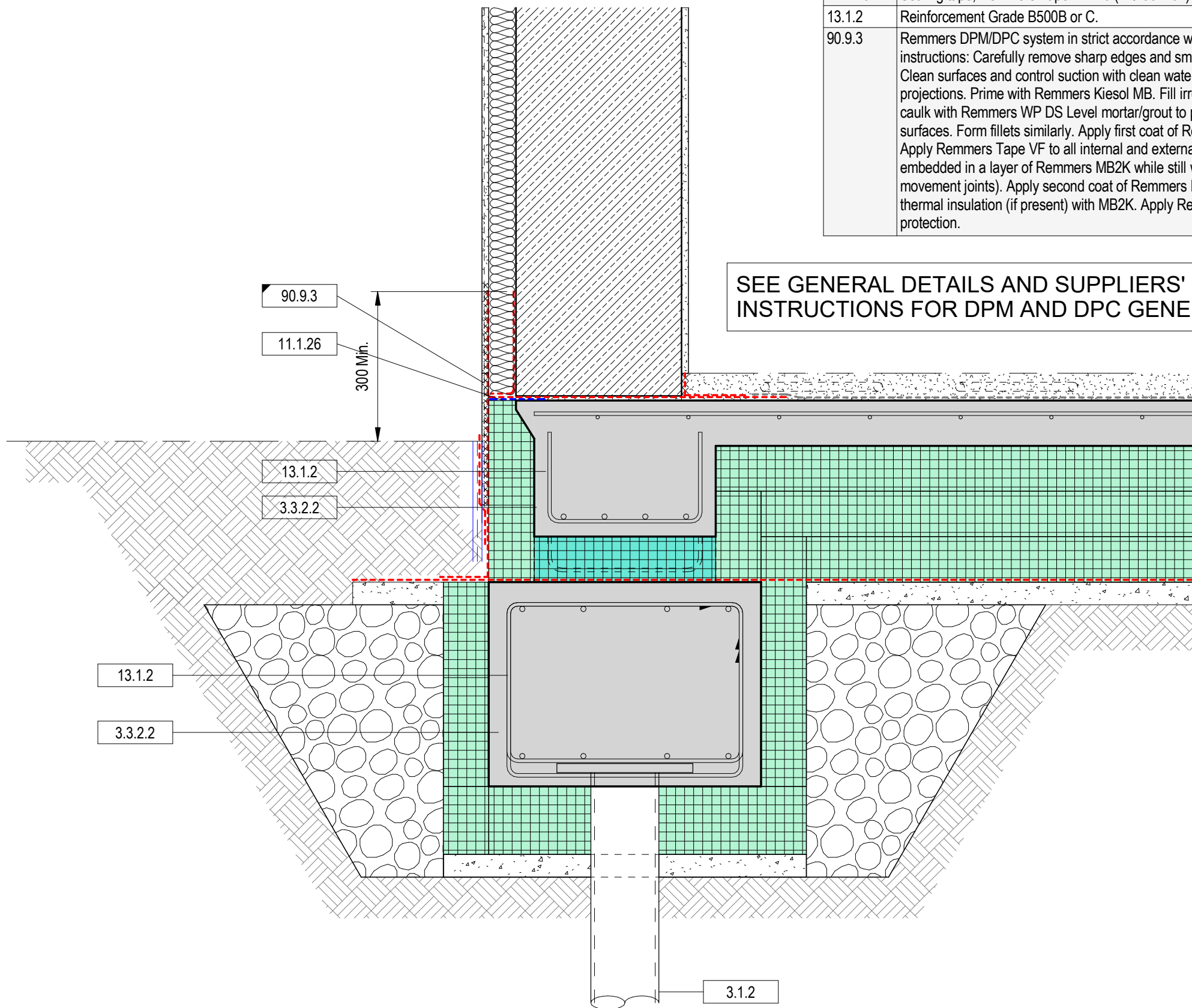
DRAWING NUMBER 0000-ESJ-ZZ-00-DR-S - 102	REV 3
---	----------

# 1 WALL BASE ON AFT FOUNDATION - LEVEL THRESHOLD

1 : 10

ALL DETAILS AND NOTES AS GENERAL CASE - DRAWING 101 - EXCEPT AS SHOWN OTHERWISE.

Key	Keynote
3.1.2	Steel screw piles.
3.3.2.2	Concrete Grade RC30/37.
11.1.26	Sealing tape, Remmers Tape VF120 (Art. 507101)
13.1.2	Reinforcement Grade B500B or C.
90.9.3	Remmers DPM/DPC system in strict accordance with manufacturer's instructions: Carefully remove sharp edges and smooth all arisses. Clean surfaces and control suction with clean water. Scrape off projections. Prime with Remmers Kiesol MB. Fill irregularities and caulk with Remmers WP DS Level mortar/grout to produce smooth surfaces. Form fillets similarly. Apply first coat of Remmers MB2K. Apply Remmers Tape VF to all internal and external corners and joints, embedded in a layer of Remmers MB2K while still wet (B240 tape at movement joints). Apply second coat of Remmers MB2K. Attach thermal insulation (if present) with MB2K. Apply Remmers DS Protect protection.



SEE GENERAL DETAILS AND SUPPLIERS' INSTRUCTIONS FOR DPM AND DPC GENERALLY.

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Rev	Description	Date
1	Initial release.	14/7/2020
2	DPC/DPM details revised to Remmers system.	18/3/2021
3	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED SMARTWALL™**



**EVOLVED SUPPLIES**

EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

TITLE  
**WALL BASE DETAIL ON PILED AFT FOUNDATION**

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 07/15/20
-----------------	------------	------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 103</b>	REV <b>3</b>
--	-----------------

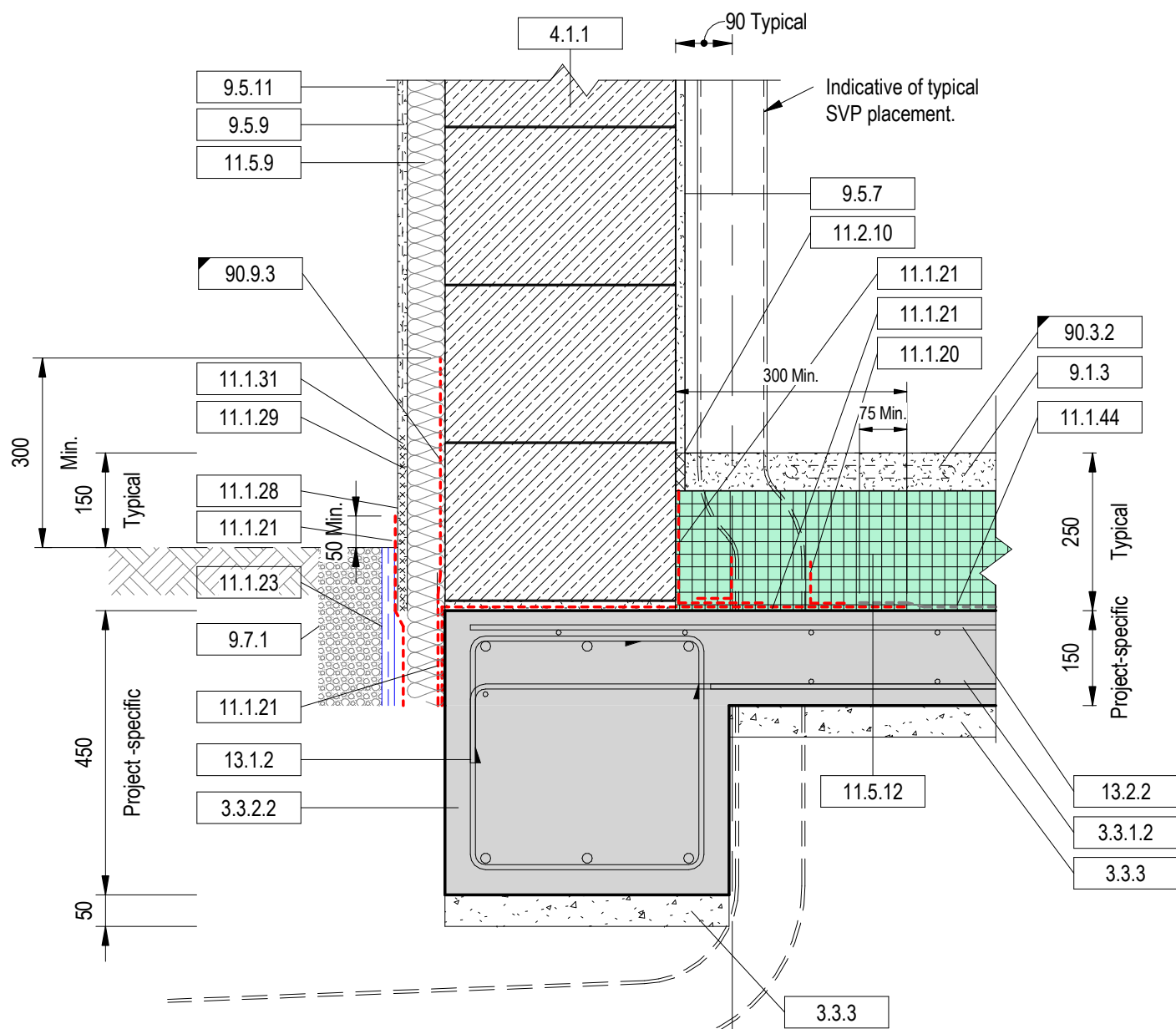
26/05/2021 15:04:58

**1**

# WALL BASE ON AFT PILED FOUNDATION

1 : 10

ALL DETAILS AND NOTES AS GENERAL CASE - DRAWING 101 - EXCEPT AS SHOWN OTHERWISE.



Key	Keynote
3.3.1.2	Concrete Grade RC30/37.
3.3.2.2	Concrete Grade RC30/37.
3.3.3	Lean concrete blinding and filling to BS8500, subject to site conditions.
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
9.1.3	Liquid self compacting concrete screed, Cemfloor Therm or equivalent. Apply in strict accordance with manufacturer's instructions. Provide all necessary movement joints and joint covers.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
9.5.11	External decorative finishes as desired. Ensure materials are compatible with render system.
9.7.1	Anti-splash shingle strip.
9.7.3	Render stop bead, UV resistant plastic (or stainless steel).
9.7.4	Remmers colour finish to suit.
11.1.20	Visqueen self-adhesive pipe collar.
11.1.21	Waterproofing and Radon-resistant membrane, Remmers MB2K (Art. 301408).
11.1.23	Protective and decoupling sheet, Remmers DS Protect (Art. 082301)
11.1.28	Cementing mortar, Remmers VM Fill (Art. 051725)
11.1.29	Rapid setting adhesive felting mortar, Remmers VM Fill Rapid (Art. 051925)
11.1.31	Mesh render reinforcement, Remmers Tex.
11.1.44	Visqueen GR SAM self-adhesive DPM and radon membrane for applied in accordance with manufacturer's instructions and minimum lap. Compliant with BS 8102 & BS 8485.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.9	Expanded polystyrene batts or boards.
11.5.12	Rigid floor/foundation insulation batts.
13.1.2	Reinforcement Grade B500B or C.
13.2.2	Flying end mesh fabric Grade B500A, B or C
90.3.2	Lay heating system pipework in floor.
90.9.3	Remmers DPM/DPC system in strict accordance with manufacturer's instructions: Carefully remove sharp edges and smooth all arisses. Clean surfaces and control suction with clean water. Scrape off projections. Prime with Remmers Kiesol MB. Fill irregularities and caulk with Remmers WP DS Level mortar/grout to produce smooth surfaces. Form fillets similarly. Apply first coat of Remmers MB2K. Apply Remmers Tape VF to all internal and external corners and joints, embedded in a layer of Remmers MB2K while still wet (B240 tape at movement joints). Apply second coat of Remmers MB2K. Attach thermal insulation (if present) with MB2K. Apply Remmers DS Protect protection.

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Rev	Description	Date
1	Initial release.	14/7/2020
2	DPC/DPM details revised to Remmers system.	18/3/2021
3	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED SUPPLIES**  
EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk



Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

TITLE  
**WALL BASE ON RAFT FOUNDATION**

CLIENT

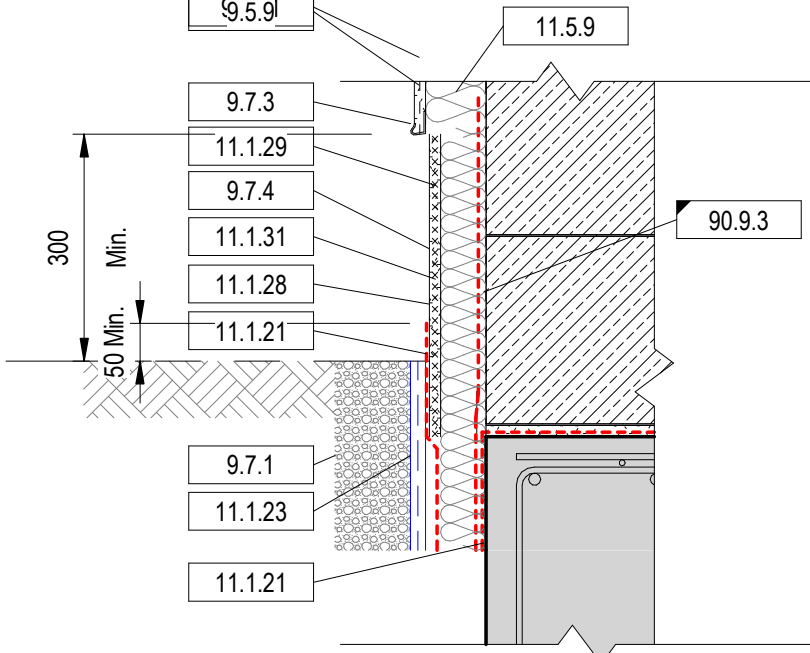
DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 104</b>	REV <b>3</b>
--	-----------------

# 1 WALL BASE ON RAFT FOUNDATION

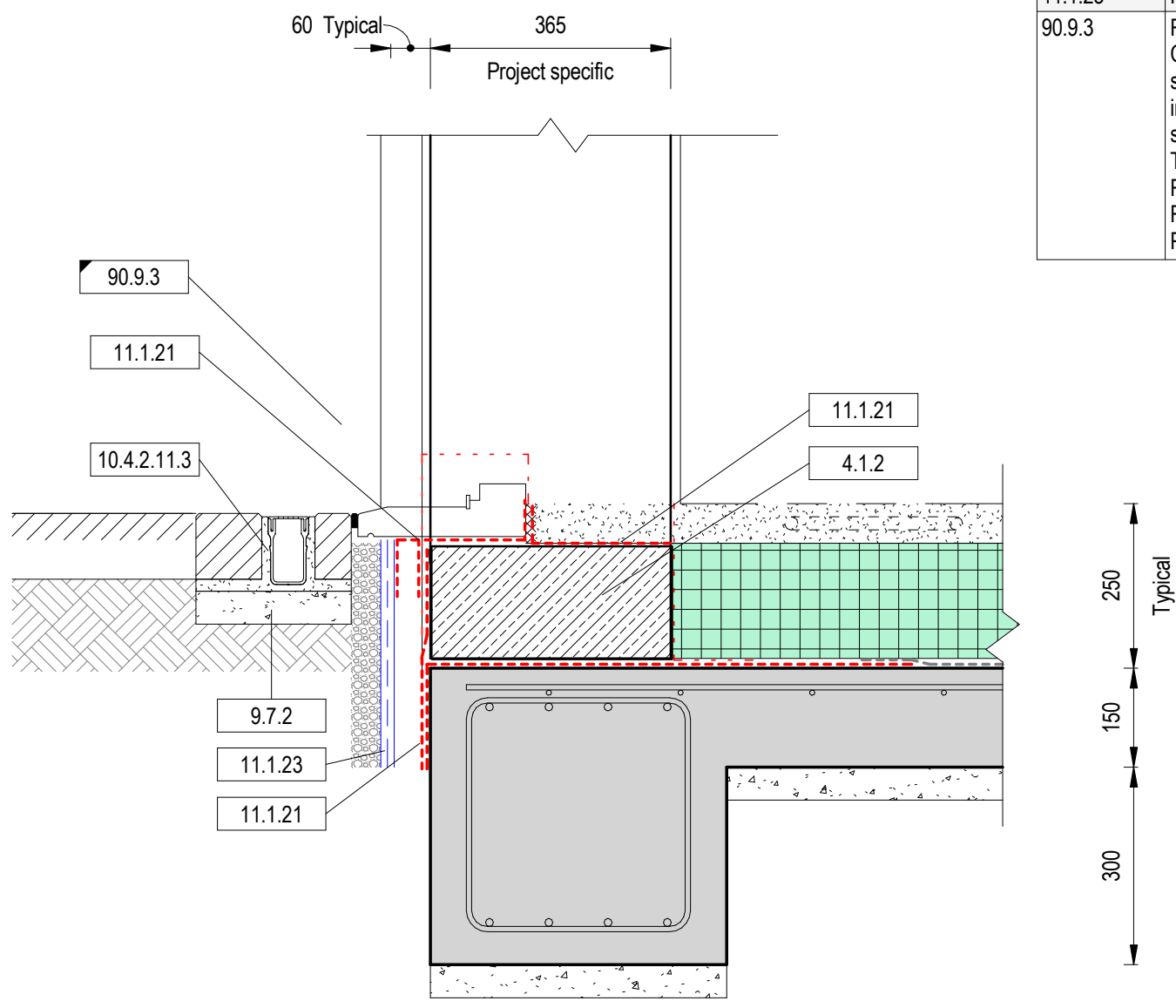
1 : 10



# 2 ALTERNATIVE PLINTH DETAIL

1 : 10

Key	Keynote
4.1.2	Smartwall blocks, half course blocks, in thin bed mortar or adhesive
9.7.2	Mass concrete beds and surrounds, concrete Grade GEN3 to BS 8500.
10.4.2.11.3	ACO Threshold Drain with connection to SW system.
11.1.21	Waterproofing and Radon-resistant membrane, Remmers MB2K (Art. 301408).
11.1.23	Protective and decoupling sheet, Remmers DS Protect (Art. 082301)
90.9.3	Remmers DPM/DPC system in strict accordance with manufacturer's instructions: Carefully remove sharp edges and smooth all arisses. Clean surfaces and control suction with clean water. Scrape off projections. Prime with Remmers Kiesol MB. Fill irregularities and caulk with Remmers WP DS Level mortar/grout to produce smooth surfaces. Form fillets similarly. Apply first coat of Remmers MB2K. Apply Remmers Tape VF to all internal and external corners and joints, embedded in a layer of Remmers MB2K while still wet (B240 tape at movement joints). Apply second coat of Remmers MB2K. Attach thermal insulation (if present) with MB2K. Apply Remmers DS Protect protection.



SEE GENERAL DETAILS AND SUPPLIERS' INSTRUCTIONS FOR DPM AND DPC GENERALLY.

# 1 WALL BASE ON RAFT FOUNDATION - LEVEL THRESHOLD

1 : 10

ALL DETAILS AND NOTES AS GENERAL CASE - DRAWING 104 - EXCEPT AS SHOWN OTHERWISE.

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Rev	Description	Date
1	Initial release.	14/7/2020
2	DPC/DPM details revised to Remmers system.	18/3/2021
3	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------

EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
SMARTWALL - TYPICAL DETAILS

TITLE  
LEVEL THRESHOLD DETAIL ON RAFT FOUNDATION

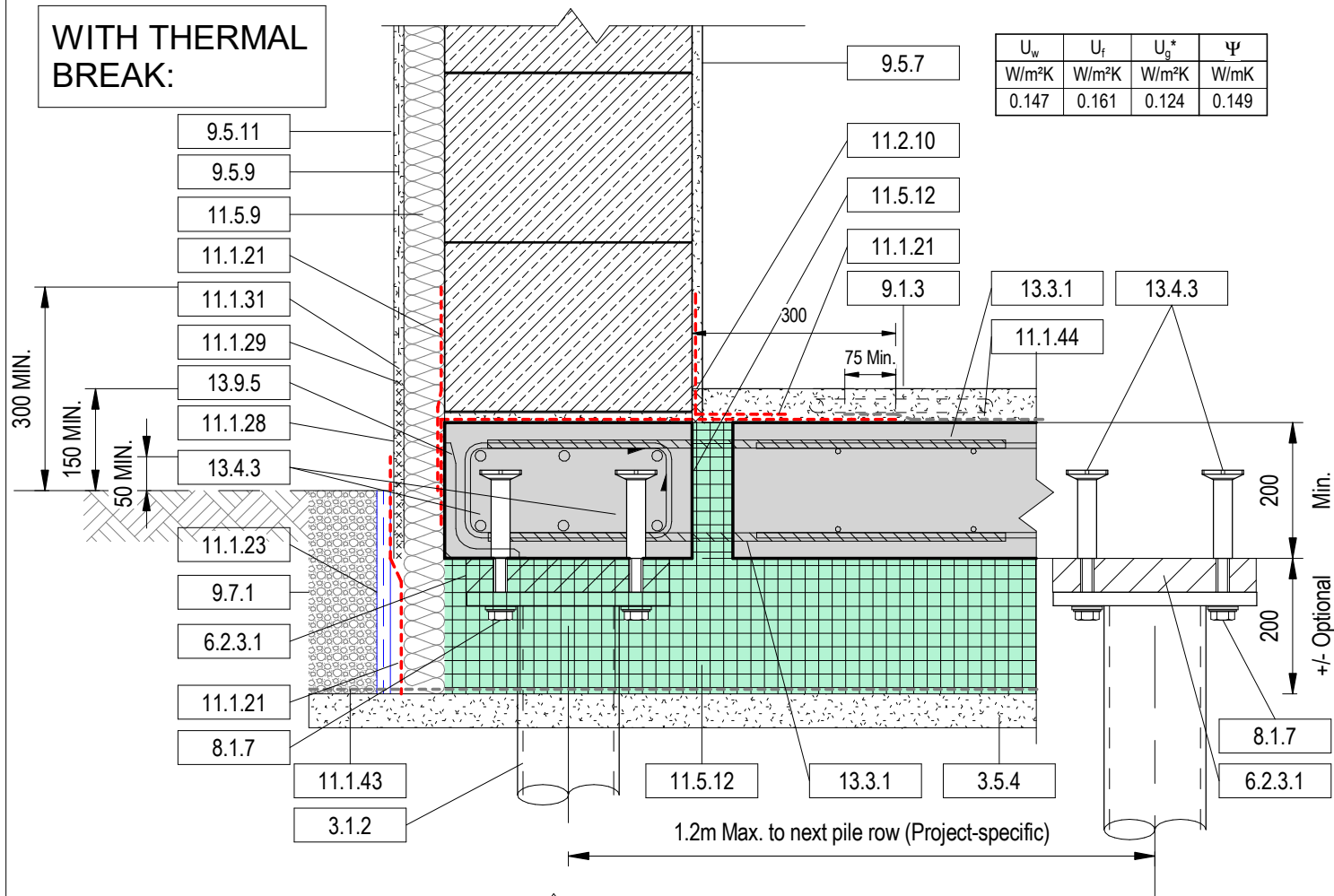
CLIENT

DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER 0000-ESJ-ZZ-00-DR-S - 105	REV 3
---	----------

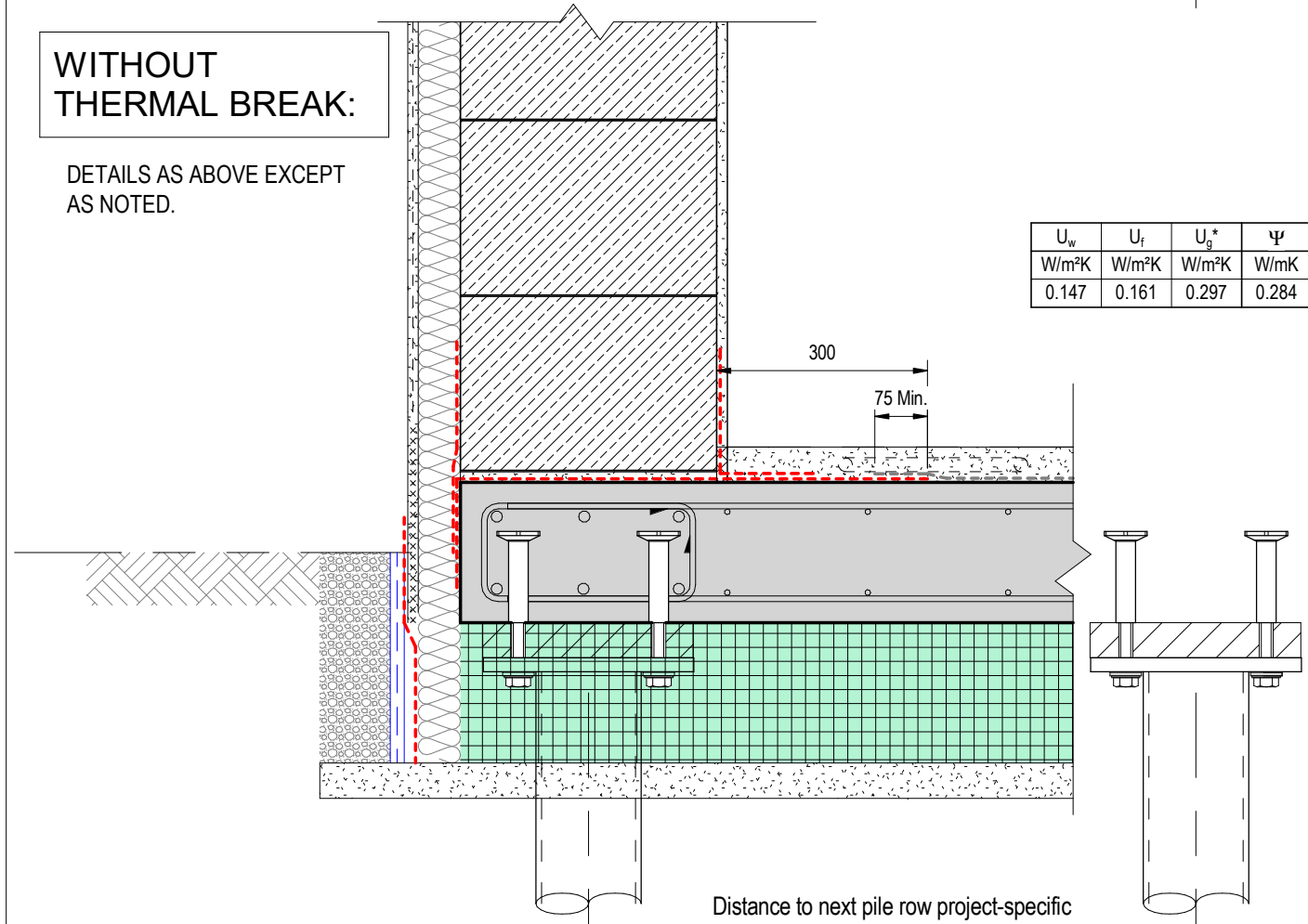
**WITH THERMAL BREAK:**



$U_w$	$U_f$	$U_g^*$	$\Psi$
W/m <sup>2</sup> K	W/m <sup>2</sup> K	W/m <sup>2</sup> K	W/mK
0.147	0.161	0.124	0.149

**WITHOUT THERMAL BREAK:**

DETAILS AS ABOVE EXCEPT AS NOTED.



$U_w$	$U_f$	$U_g^*$	$\Psi$
W/m <sup>2</sup> K	W/m <sup>2</sup> K	W/m <sup>2</sup> K	W/mK
0.147	0.161	0.297	0.284

Key	Keynote
3.1.2	Steel screw piles.
3.5.4	Lightly compacted granular sub-base material. Min. thickness 150, blinded with sand, to form firm, level and uniform base.
6.2.3.1	Armatherm 500, with Armatherm bushes and Armatherm washers to all bolts or anchors.
8.1.7	M20, zinc plated steel Grade 8.8, hex head.
9.1.3	Liquid self compacting concrete screed, Cemfloor Therm or equivalent. Apply in strict accordance with manufacturer's instructions. Provide all necessary movement joints and joint covers.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
9.5.11	External decorative finishes as desired. Ensure materials are compatible with render system.
9.7.1	Anti-splash shingle strip.
11.1.21	Waterproofing and Radon-resistant membrane, Remmers MB2K (Art. 301408).
11.1.23	Protective and decoupling sheet, Remmers DS Protect (Art. 082301)
11.1.28	Cementing mortar, Remmers VM Fill (Art. 051725)
11.1.29	Rapid setting adhesive felting mortar, Remmers VM Fill Rapid (Art. 051925)
11.1.31	Mesh render reinforcement, Remmers Tex.
11.1.43	Generic HDPE membrane 500g
11.1.44	Visqueen GR SAM self-adhesive DPM and radon membrane for applied in accordance with manufacturer's instructions and minimum lap. Compliant with BS 8102 & BS 8485.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.9	Expanded polystyrene batts or boards.
11.5.12	Rigid floor/foundation insulation batts.
13.3.1	FRP Reinforcement rod.
13.4.3	Ancon KSN16S anchorage.
13.9.5	Edge form, Speed-Edge formwork, galvanized steel.

Thermal data based on calculation with b=8m, 50mm concrete screed, Smartwall S7.5 block. Piles not accounted for (project specific) but estimated loss less than approx. 4W per pile. Soil taken as fine-grained (silt).

\*U<sub>g</sub> calculated in accordance with EN10211 Cl. 12.42 Option A & EN13370 Cl. 7.1 and Annex D.

Values given are indicative, due to inevitable variation of each project from standard details, and should be superseded by project-specific calculations where precision is critical.

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Rev	Description	Date
1	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------

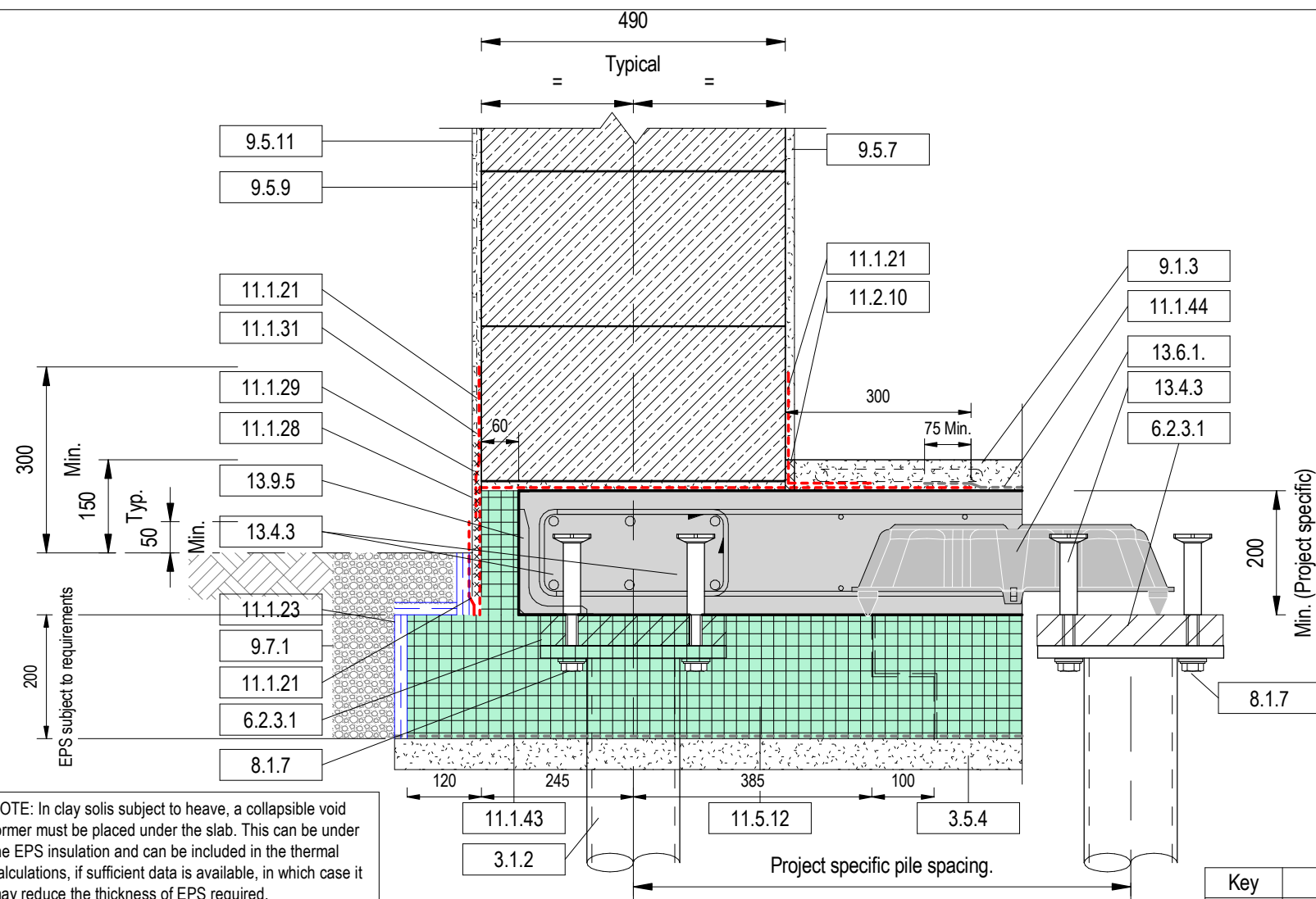
EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT <b>SMARTWALL - TYPICAL DETAILS</b>		
TITLE <b>WALL BASE ON FLAT RAFT (365+EWI)</b>		
CLIENT		
DRAWN BY RAB	CHECKED BY	DATE 05/10/21
SCALE (@ A3) 1 : 10	PROJECT REF. N/C	
DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 106</b>	REV <b>1</b>	

**1 WALL BASE ON FLAT RAFT FOUNDATION (EWI)**  
1 : 10

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.



NOTE: Void formers cast into concrete are optional and subject to economics of the project. Geoplast formers as shown but others are available.

Concrete in foundations shall be of a designed low-carbon mix, using cement replacement (e.g. CEM II & CEM III), water reducing superplasticiser (as SCC), and up to 20% approved recycled aggregate (subject to engineer's design and concrete supplier's design availability).

NOTE: In clay soils subject to heave, a collapsible void former must be placed under the slab. This can be under the EPS insulation and can be included in the thermal calculations, if sufficient data is available, in which case it may reduce the thickness of EPS required.

# 1 WALL BASE ON FLAT RAFT FOUNDATION

1 : 10

Key	Keynote
3.1.2	Steel screw piles.
3.5.4	Lightly compacted granular sub-base material. Min. thickness 150, blinded with sand, to form firm, level and uniform base.
6.2.3.1	Armatherm 500, with Armatherm bushes and Armatherm washers to all bolts or anchors.
8.1.7	M20, zinc plated steel Grade 8.8, hex head.
9.1.3	Liquid self compacting concrete screed, Cemfloor Therm or equivalent. Apply in strict accordance with manufacturer's instructions. Provide all necessary movement joints and joint covers.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
9.5.11	External decorative finishes as desired. Ensure materials are compatible with render system.
9.7.1	Anti-splash shingle strip.
11.1.21	Waterproofing and Radon-resistant membrane, Remmers MB2K (Art. 301408).
11.1.23	Protective and decoupling sheet, Remmers DS Protect (Art. 082301)
11.1.28	Cementing mortar, Remmers VM Fill (Art. 051725)
11.1.29	Rapid setting adhesive felting mortar, Remmers VM Fill Rapid (Art. 051925)
11.1.31	Mesh render reinforcement, Remmers Tex.
11.1.43	Generic HDPE membrane 500g
11.1.44	Visqueen GR SAM self-adhesive DPM and radon membrane for applied in accordance with manufacturer's instructions and minimum lap. Compliant with BS 8102 & BS 8485.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.12	Rigid floor/foundation insulation batts.
13.4.3	Ancon KSN16S anchorage.
13.6.1	Geoplast Nautilus EVO void formers.
13.9.5	Edge form, Speed-Edge formwork, galvanized steel.

	U <sub>w</sub>	U <sub>f</sub>	U <sub>g</sub> *	Ψ
	W/m²K	W/m²K	W/m²K	W/mK
1) As shown (200mm EPS under slab)	0.148	0.160	0.122	0.046
2) As 1 + add 100mm EPS under slab	0.148	0.109	0.090	0.080
3) As 2 + add 25 EPS under screed.	0.148	0.101	0.084	0.056

Thermal data based on calculation with b=8m, 50mm concrete screed, Smartwall S7.5 block. Piles not accounted for (project specific) but estimated loss less than approx. 4W per pile. Soil taken as fine-grained (silt).

\*U<sub>g</sub> calculated in accordance with EN10211 Cl. 12.42 Option A & EN13370 Cl. 7.1 and Annex D.

Values given are indicative, due to inevitable variation of each project from standard details, and should be superseded by project-specific calculations where precision is critical.

Rev	Description	Date
1	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------

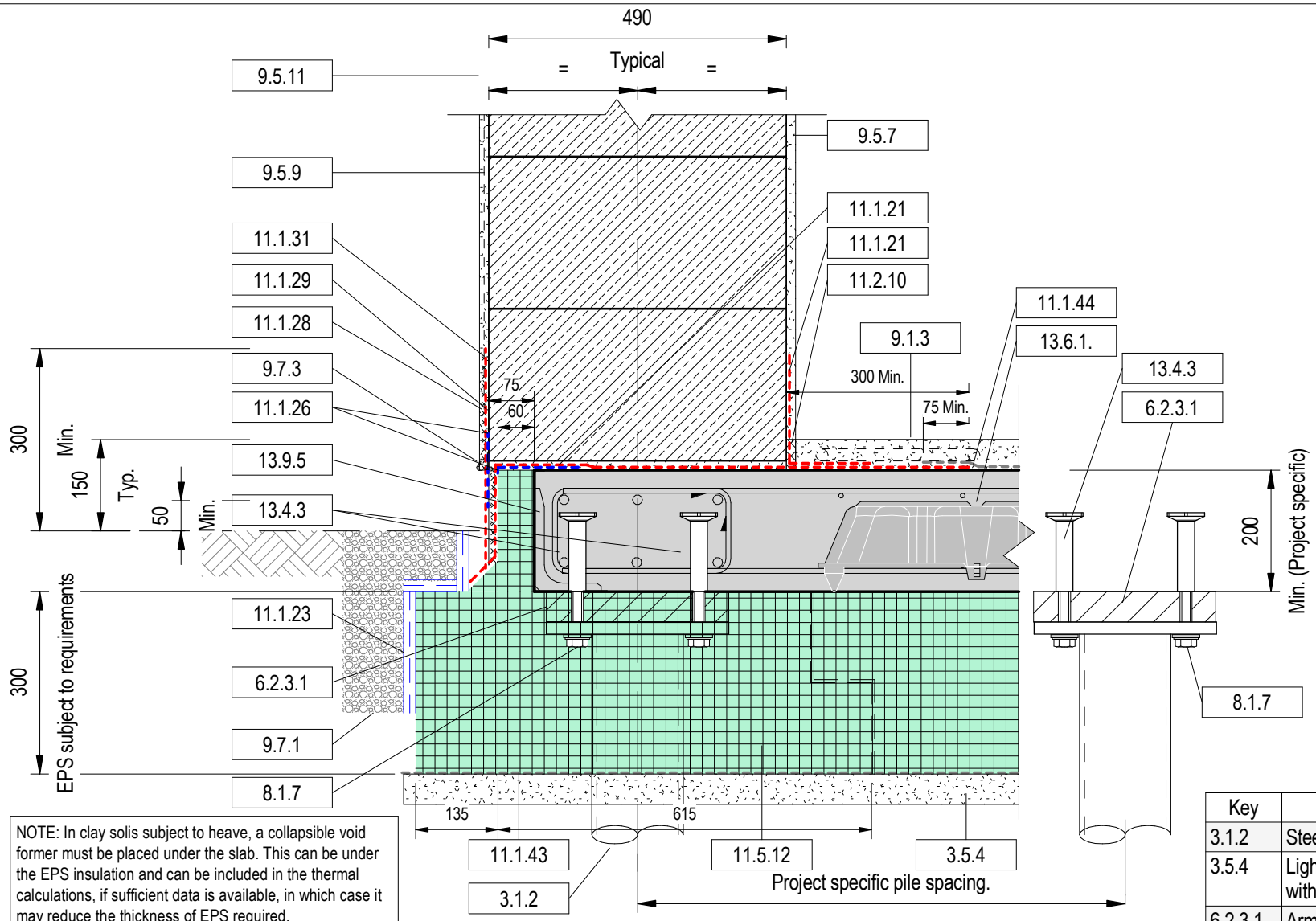
EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT <b>SMARTWALL - TYPICAL DETAILS</b>		
TITLE <b>WALL BASE ON FLAT RAFT</b>		
CLIENT		
DRAWN BY RAB	CHECKED BY Checker	DATE 05/12/21
SCALE (@ A3) 1 : 10	PROJECT REF. N/C	
DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 107</b>	REV <b>1</b>	



ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.



NOTE: Void formers cast into concrete are optional and subject to economics of the project. Geoplast formers as shown but others are available.

Concrete in foundations shall be of a designed low-carbon mix, using cement replacement (e.g. CEM II & CEM III), water reducing superplasticiser (as SCC), and up to 20% approved recycled aggregate (subject to engineer's design and concrete supplier's design availability).

NOTE: In clay soils subject to heave, a collapsible void former must be placed under the slab. This can be under the EPS insulation and can be included in the thermal calculations, if sufficient data is available, in which case it may reduce the thickness of EPS required.

Key	Keynote
3.1.2	Steel screw piles.
3.5.4	Lightly compacted granular sub-base material. Min. thickness 150, blinded with sand, to form firm, level and uniform base.
6.2.3.1	Armatherm 500, with Armatherm bushes and Armatherm washers to all bolts or anchors.
8.1.7	M20, zinc plated steel Grade 8.8, hex head.
9.1.3	Liquid self compacting concrete screed, Cemfloor Therm or equivalent. Apply in strict accordance with manufacturer's instructions. Provide all necessary movement joints and joint covers.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
9.5.11	External decorative finishes as desired. Ensure materials are compatible with render system.
9.7.1	Anti-splash shingle strip.
9.7.3	Render stop bead, UV resistant plastic (or stainless steel).
11.1.21	Waterproofing and Radon-resistant membrane, Remmers MB2K (Art. 301408).
11.1.23	Protective and decoupling sheet, Remmers DS Protect (Art. 082301)
11.1.26	Sealing tape, Remmers Tape VF120 (Art. 507101)
11.1.28	Cementing mortar, Remmers VM Fill (Art. 051725)
11.1.29	Rapid setting adhesive felting mortar, Remmers VM Fill Rapid (Art. 051925)
11.1.31	Mesh render reinforcement, Remmers Tex.
11.1.43	Generic HDPE membrane 500g
11.1.44	Visqueen GR SAM self-adhesive DPM and radon membrane for applied in accordance with manufacturer's instructions and minimum lap. Compliant with BS 8102 & BS 8485.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.12	Rigid floor/foundation insulation batts.
13.4.3	Ancon KSN16S anchorage.
13.6.1	Geoplast Nautilus EVO void formers.
13.9.5	Edge form, Speed-Edge formwork, galvanized steel.

# WALL BASE ON FLAT RAFT FOUNDATION (PLINTH)

1

1 : 10

	U <sub>w</sub>	U <sub>f</sub>	U <sub>g</sub> *	Ψ
	W/m <sup>2</sup> K	W/m <sup>2</sup> K	W/m <sup>2</sup> K	W/mK
1) As shown.	0.148	0.109	0.089	0.066
2) As 1 + add 25mm EPS under screed.	0.148	0.101	0.084	0.051
3) As 1 + add 50mm EPS under screed.	0.148	0.094	0.079	0.044

Thermal data based on calculation with b=8m, 50mm concrete screed, Smartwall S7.5 block. Piles not accounted for (project specific) but estimated loss less than approx. 4W per pile. Soil taken as fine-grained (silt).

\*U<sub>g</sub> calculated in accordance with EN10211 Cl. 12.42 Option A & EN13370 Cl. 7.1 and Annex D.

Values given are indicative, due to inevitable variation of each project from standard details, and should be superseded by project-specific calculations where precision is critical.

Rev	Description	Date

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED SMARTWALL™**



EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

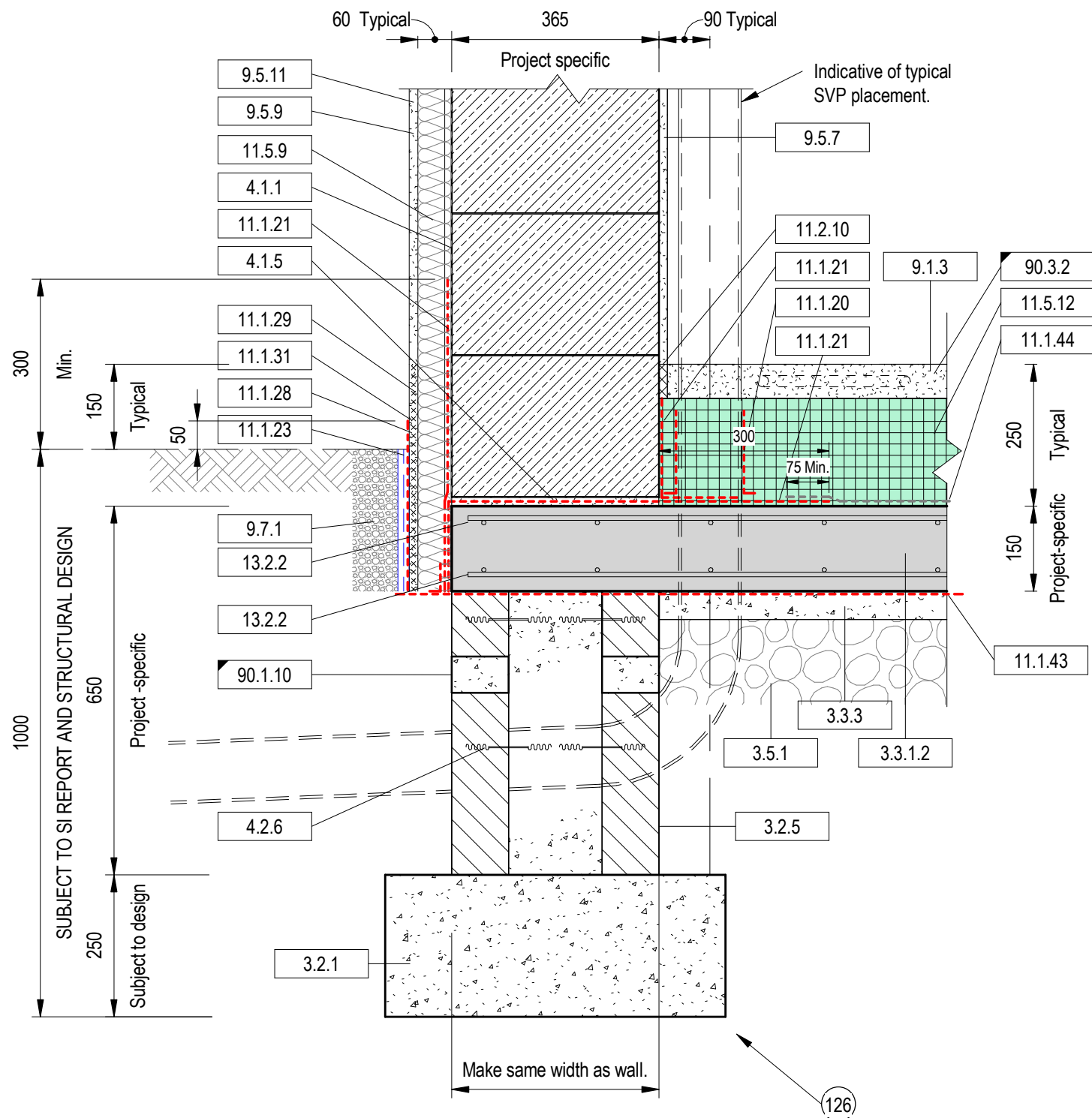
TITLE  
**WALL BASE ON FLAT RAFT WITH PLINTH**

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 05/17/21
-----------------	------------	------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 108</b>	REV
--	-----



Key	Keynote
3.2.1	Mass concrete, Grade FND2 to BS 8500.
3.2.5	Foundation wall. Construct in concrete blockwork to same o/a thickness as supported wall. Alternatively, lay two leaves of concrete blockwork, to same width as wall, and fill with mass concrete Grade FDN2 to BS 8500. All blocks must be certified suitable for use below ground.
3.3.1.2	Concrete Grade RC30/37.
3.3.3	Lean concrete blinding and filling to BS8500, subject to site conditions.
3.5.1	Well compacted granular sub-base material. Min. thickness 150. Where the thickness is greater than 500mm, compact in layers not exceeding 250 deep each and lay alternate layers of lean mix concrete.
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
4.1.5	Full thickness bed or leveling bed of insulating mortar,
4.2.6	Flat generic tie with key, stainless steel.
9.1.3	Liquid self compacting concrete screed, Cemfloor Therm or equivalent. Apply in strict accordance with manufacturer's instructions. Provide all necessary movement joints and joint covers.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
9.5.11	External decorative finishes as desired. Ensure materials are compatible with render system.
9.7.1	Anti-splash shingle strip.
11.1.20	Visqueen self-adhesive pipe collar.
11.1.21	Waterproofing and Radon-resistant membrane, Remmers MB2K (Art. 301408).
11.1.23	Protective and decoupling sheet, Remmers DS Protect (Art. 082301)
11.1.28	Cementing mortar, Remmers VM Fill (Art. 051725)
11.1.29	Rapid setting adhesive felting mortar, Remmers VM Fill Rapid (Art. 051925)
11.1.31	Mesh render reinforcement, Remmers Tex.
11.1.43	Generic HDPE membrane 500g
11.1.44	Visqueen GR SAM self-adhesive DPM and radon membrane for applied in accordance with manufacturer's instructions and minimum lap. Compliant with BS 8102 & BS 8485.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.9	Expanded polystyrene batts or boards.
11.5.12	Rigid floor/foundation insulation batts.
13.2.2	Flying end mesh fabric Grade B500A, B or C
90.1.10	Provide rocker pipes and lintels over at horizontal and sloping service penetrations. Pack around pipes with compressible filler.
90.3.2	Lay heating system pipework in floor.

Alternative plinth detail exists - see raft foundation option, Drawing 104.

# 1 WALL BASE ON STRIP FOUNDATION

1 : 10

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Rev	Description	Date
1	Initial release.	14/7/2020
2	DPC/DPM details revised to Remmers system.	18/3/2021
3	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------

EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

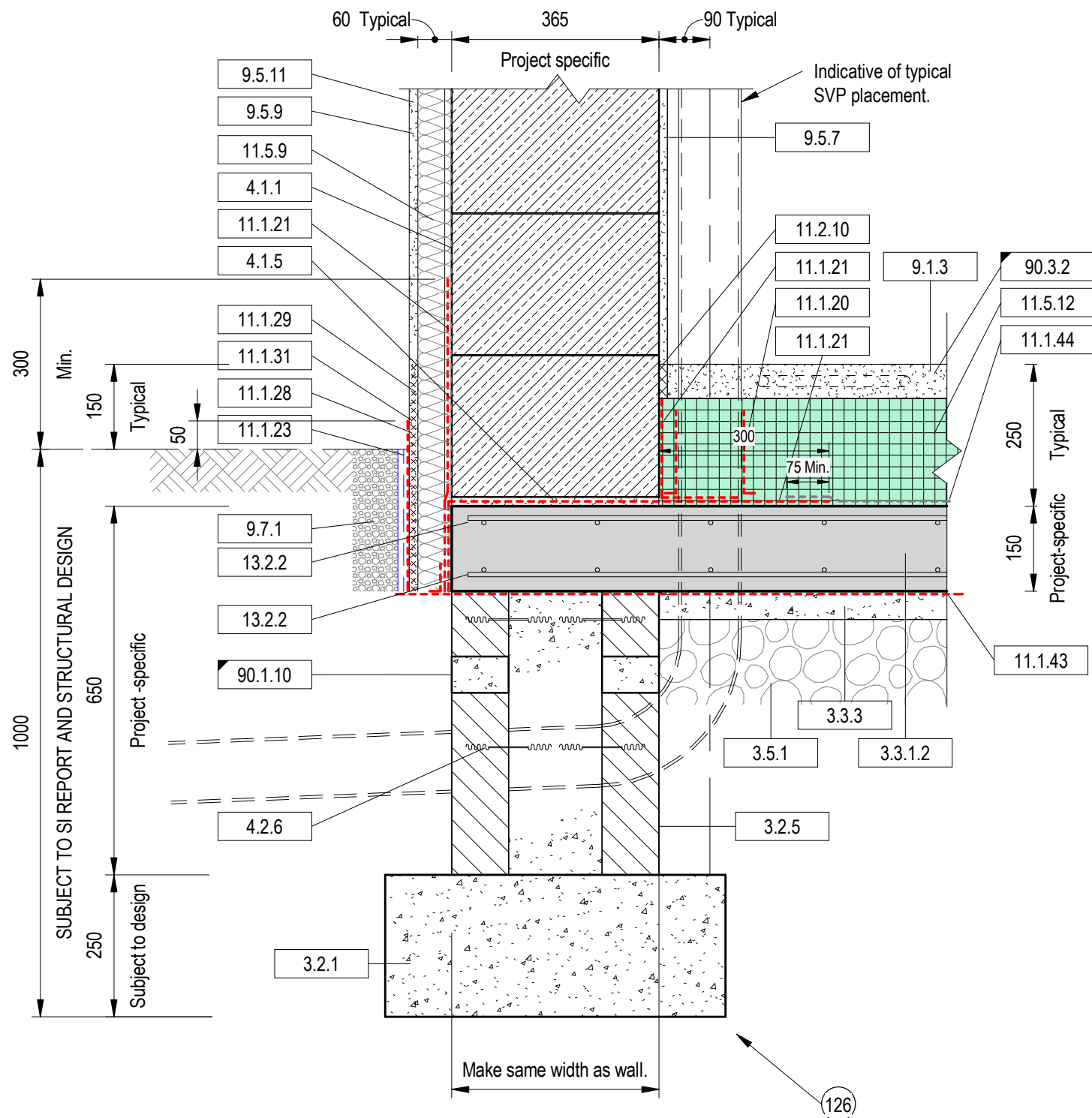
TITLE  
**WALL BASE ON STRIP FOOTING**

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 07/15/20
-----------------	------------	------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 109</b>	REV <b>3</b>
--	-----------------



Key	Keynote
3.2.1	Mass concrete, Grade FND2 to BS 8500.
3.2.5	Foundation wall. Construct in concrete blockwork to same o/a thickness as supported wall. Alternatively, lay two leaves of concrete blockwork, to same width as wall, and fill with mass concrete Grade FDN2 to BS 8500. All blocks must be certified suitable for use below ground.
3.3.1.2	Concrete Grade RC30/37.
3.3.3	Lean concrete blinding and filling to BS8500, subject to site conditions.
3.5.1	Well compacted granular sub-base material. Min. thickness 150. Where the thickness is greater than 500mm, compact in layers not exceeding 250 deep each and lay alternate layers of lean mix concrete.
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
4.1.5	Full thickness bed or leveling bed of insulating mortar,
4.2.6	Flat generic tie with key, stainless steel.
9.1.3	Liquid self compacting concrete screed, Cemfloor Therm or equivalent. Apply in strict accordance with manufacturer's instructions. Provide all necessary movement joints and joint covers.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
9.5.11	External decorative finishes as desired. Ensure materials are compatible with render system.
9.7.1	Anti-splash shingle strip.
11.1.20	Visqueen self-adhesive pipe collar.
11.1.21	Waterproofing and Radon-resistant membrane, Remmers MB2K (Art. 301408).
11.1.23	Protective and decoupling sheet, Remmers DS Protect (Art. 082301)
11.1.28	Cementing mortar, Remmers VM Fill (Art. 051725)
11.1.29	Rapid setting adhesive felting mortar, Remmers VM Fill Rapid (Art. 051925)
11.1.31	Mesh render reinforcement, Remmers Tex.
11.1.43	Generic HDPE membrane 500g
11.1.44	Visqueen GR SAM self-adhesive DPM and radon membrane for applied in accordance with manufacturer's instructions and minimum lap. Compliant with BS 8102 & BS 8485.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.9	Expanded polystyrene batts or boards.
11.5.12	Rigid floor/foundation insulation batts.
13.2.2	Flying end mesh fabric Grade B500A, B or C
90.1.10	Provide rocker pipes and lintels over at horizontal and sloping service penetrations. Pack around pipes with compressible filler.
90.3.2	Lay heating system pipework in floor.

Alternative plinth detail exists - see raft foundation option, Drawing 104.

# 1 WALL BASE ON STRIP FOUNDATION

1 : 10

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Rev	Description	Date
1	Initial release.	14/7/2020
2	DPC/DPM details revised to Remmers system.	18/3/2021
3	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------

EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
SMARTWALL - TYPICAL DETAILS

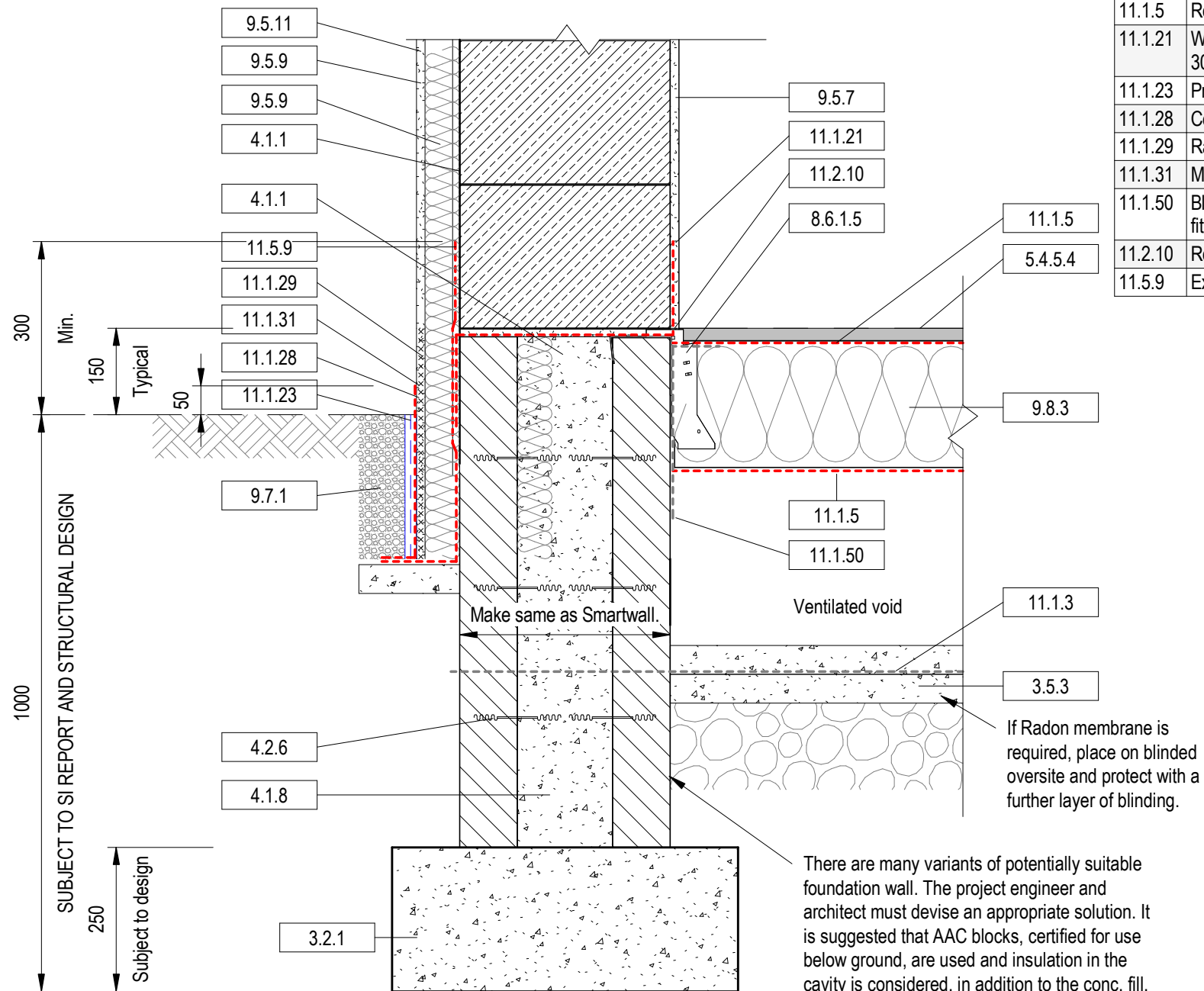
TITLE  
WALL BASE ON STRIP FOOTING

CLIENT

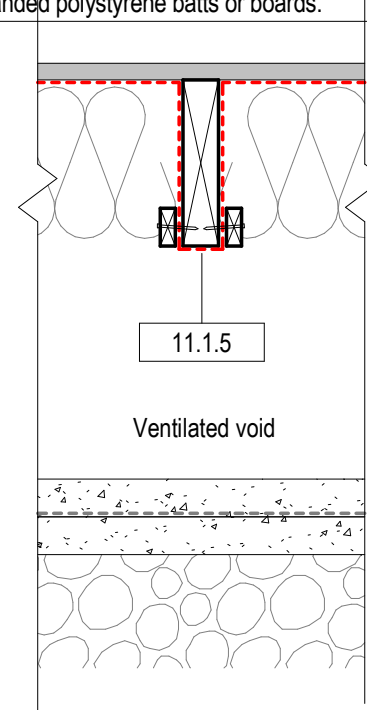
DRAWN BY RAB	CHECKED BY	DATE 07/15/20
-----------------	------------	------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER 0000-ESJ-ZZ-00-DR-S - 109	REV 3
---	----------



Key	Keynote
3.2.1	Mass concrete, Grade FND2 to BS 8500.
3.5.3	Blind with concrete, subject to site conditions, Grade GEN0 to BS8500, min. 50mm thick.
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
4.1.8	Mass concrete infill, Grade FND, between leaves of cavity wall. Cast in projecting ties each side.
4.2.6	Flat generic tie with key, stainless steel.
5.4.5.4	OSB3 floor boarding, 22 thick, nailed or screwed at max. 150c/c. Ensure all ends and edges are supported. Fix additional headers and noggings as necessary.
6.6.1.5	Restraint joist hangers, design by others, e.g. Simpson Strong-Tie SFH.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
9.5.11	External decorative finishes as desired. Ensure materials are compatible with render system.
9.7.1	Anti-splash shingle strip.
9.8.3	Mineral wool batts.
11.1.3	Rothoblaas Floor Radon Evo membrane.
11.1.5	Rothoblaas Traspir 170 breathable sarking membrane.
11.1.21	Waterproofing and Radon-resistant membrane, Remmers MB2K (Art. 301408).
11.1.23	Protective and decoupling sheet, Remmers DS Protect (Art. 082301)
11.1.28	Cementing mortar, Remmers VM Fill (Art. 051725)
11.1.29	Rapid setting adhesive felting mortar, Remmers VM Fill Rapid (Art. 051925)
11.1.31	Mesh render reinforcement, Remmers Tex.
11.1.50	Blowerproof liquid parqing/sealing, brush or spray applied, behind any fittings and penetrations or face-fixed components.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.9	Expanded polystyrene batts or boards.



# 1 WALL BASE ON STRIP FOUNDATION - TIMBER FLOOR (1)

1 : 10

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Rev	Description	Date

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED  
SMARTWALL™**



EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

TITLE  
**WALL BASE ON STRIP FOOTING - TIMBER FLOOR (1)**

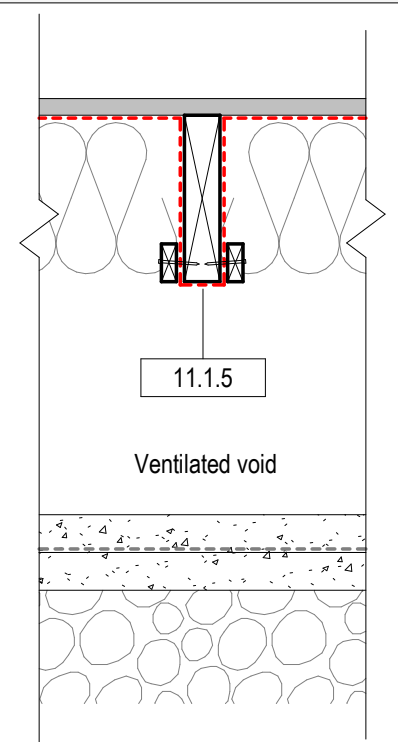
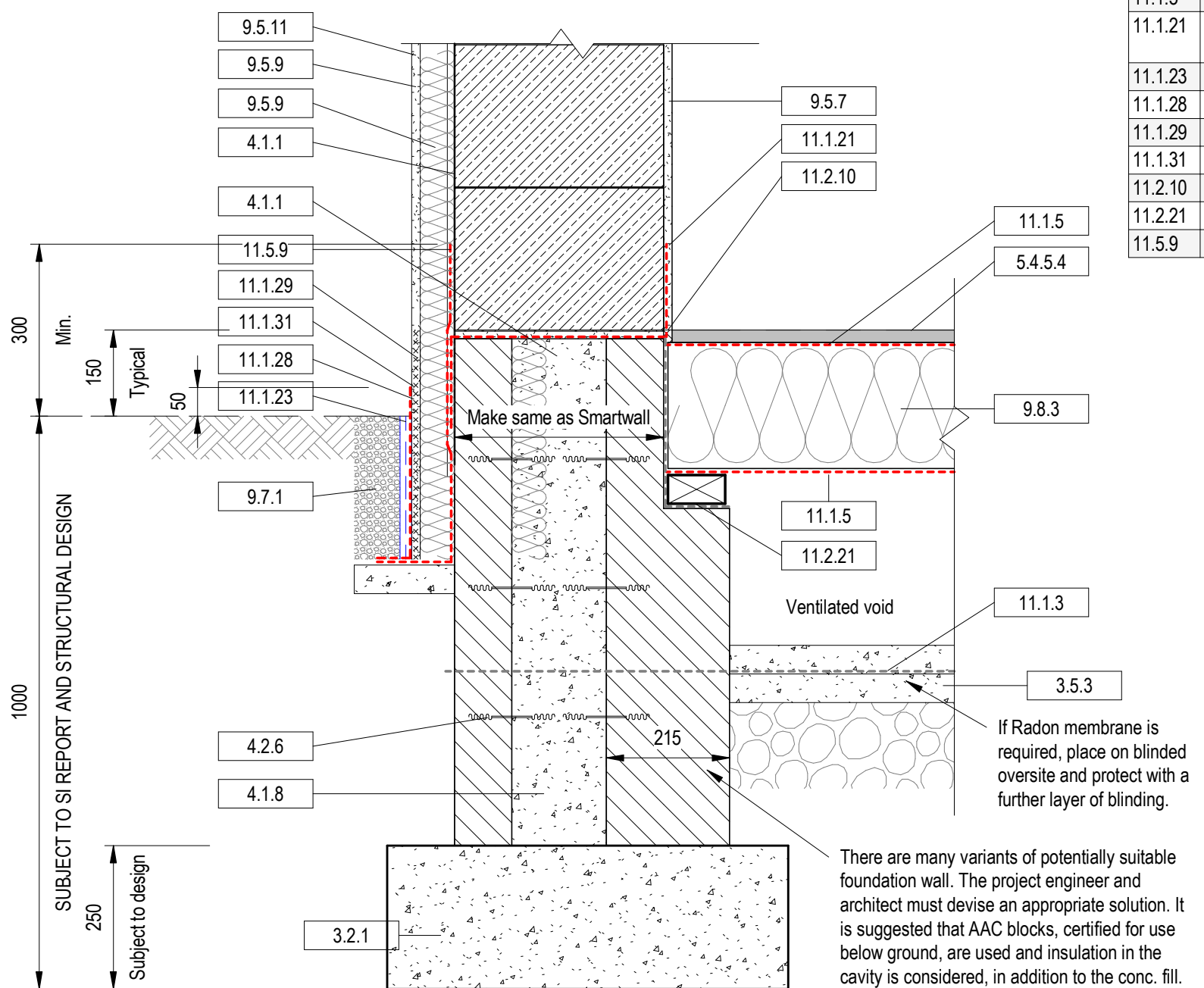
CLIENT

DRAWN BY RAB	CHECKED BY	DATE 06/16/21
-----------------	------------	------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 110</b>	REV
--	-----

Key	Keynote
3.2.1	Mass concrete, Grade FND2 to BS 8500.
3.5.3	Blind with concrete, subject to site conditions, Grade GEN0 to BS8500, min. 50mm thick.
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
4.1.8	Mass concrete infill, Grade FND, between leaves of cavity wall. Cast in projecting ties each side.
4.2.6	Flat generic tie with key, stainless steel.
5.4.5.4	OSB3 floor boarding, 22 thick, nailed or screwed at max. 150c/c. Ensure all ends and edges are supported. Fix additional headers and noggings as necessary.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
9.5.11	External decorative finishes as desired. Ensure materials are compatible with render system.
9.7.1	Anti-splash shingle strip.
9.8.3	Mineral wool batts.
11.1.3	Rothoblaas Floor Radon Evo membrane.
11.1.5	Rothoblaas Traspir 170 breathable sarking membrane.
11.1.21	Waterproofing and Radon-resistant membrane, Remmers MB2K (Art. 301408).
11.1.23	Protective and decoupling sheet, Remmers DS Protect (Art. 082301)
11.1.28	Cementing mortar, Remmers VM Fill (Art. 051725)
11.1.29	Rapid setting adhesive felting mortar, Remmers VM Fill Rapid (Art. 051925)
11.1.31	Mesh render reinforcement, Remmers Tex.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.2.21	Rothoblaas Bytum Band.
11.5.9	Expanded polystyrene batts or boards.



ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Rev	Description	Date

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED  
SMARTWALL™**



EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

TITLE  
**WALL BASE ON STRIP FOOTING - TIMBER FLOOR (2)**

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 06/17/21
-----------------	------------	------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

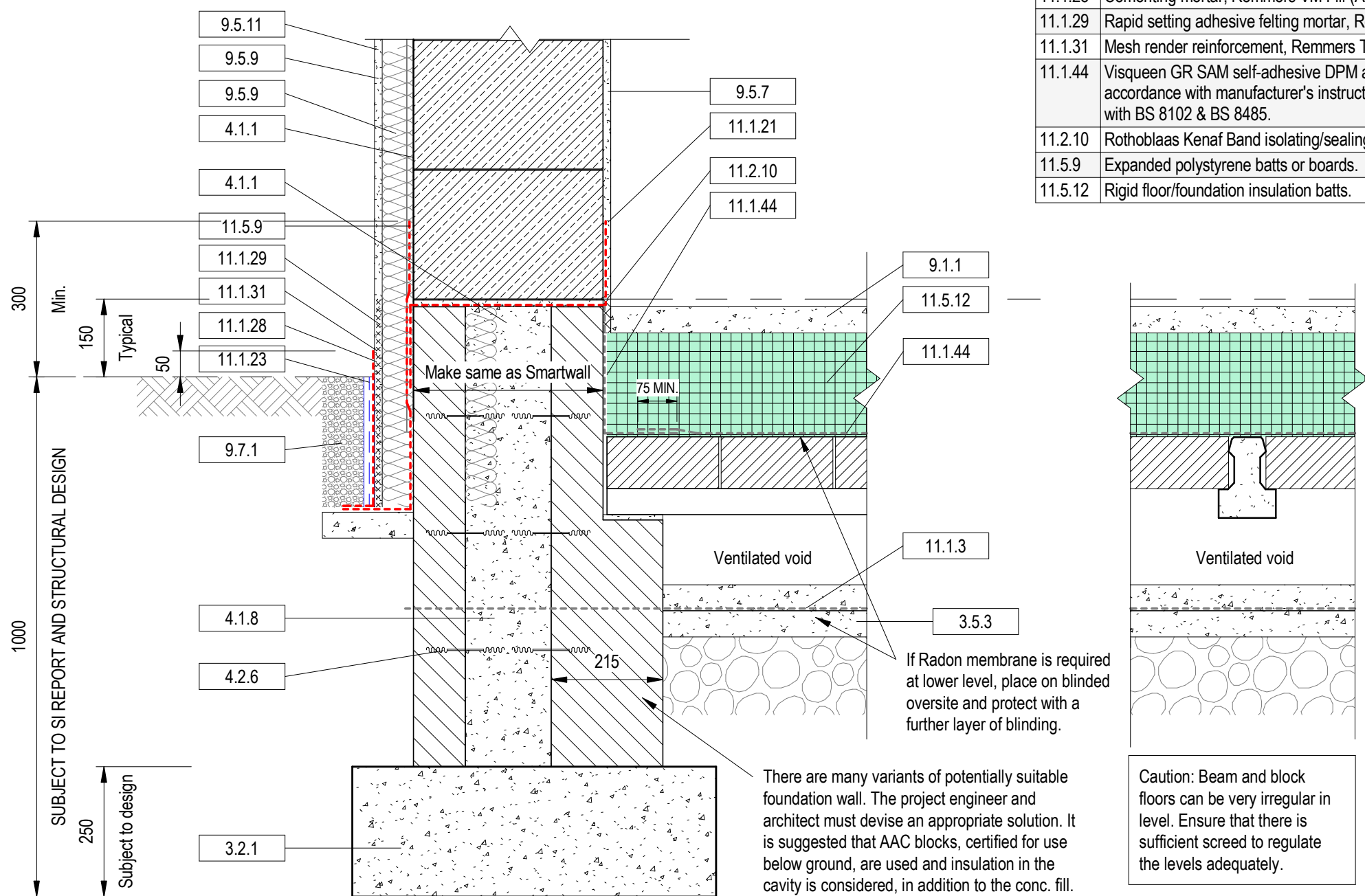
DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 111</b>	REV
--	-----

# 1 WALL BASE ON STRIP FOUNDATION - TIMBER FLOOR (2)

1 : 10


Key	Keynote
3.2.1	Mass concrete, Grade FND2 to BS 8500.
3.5.3	Blind with concrete, subject to site conditions, Grade GEN0 to BS8500, min. 50mm thick.
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
4.1.8	Mass concrete infill, Grade FND, between leaves of cavity wall. Cast in projecting ties each side.
4.2.6	Flat generic tie with key, stainless steel.
9.1.1	Concrete screed.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
9.5.11	External decorative finishes as desired. Ensure materials are compatible with render system.
9.7.1	Anti-splash shingle strip.
11.1.3	Rothoblaas Floor Radon Evo membrane.
11.1.21	Waterproofing and Radon-resistant membrane, Remmers MB2K (Art. 301408).
11.1.23	Protective and decoupling sheet, Remmers DS Protect (Art. 082301)
11.1.28	Cementing mortar, Remmers VM Fill (Art. 051725)
11.1.29	Rapid setting adhesive felting mortar, Remmers VM Fill Rapid (Art. 051925)
11.1.31	Mesh render reinforcement, Remmers Tex.
11.1.44	Visqueen GR SAM self-adhesive DPM and radon membrane for applied in accordance with manufacturer's instructions and minimum lap. Compliant with BS 8102 & BS 8485.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.9	Expanded polystyrene batts or boards.
11.5.12	Rigid floor/foundation insulation batts.

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.




Rev	Description	Date

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED  
SMARTWALL™**



EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

TITLE  
**WALL BASE ON STRIP FOOTING - BEAM & BLOCK**

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 06/17/21
-----------------	------------	------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

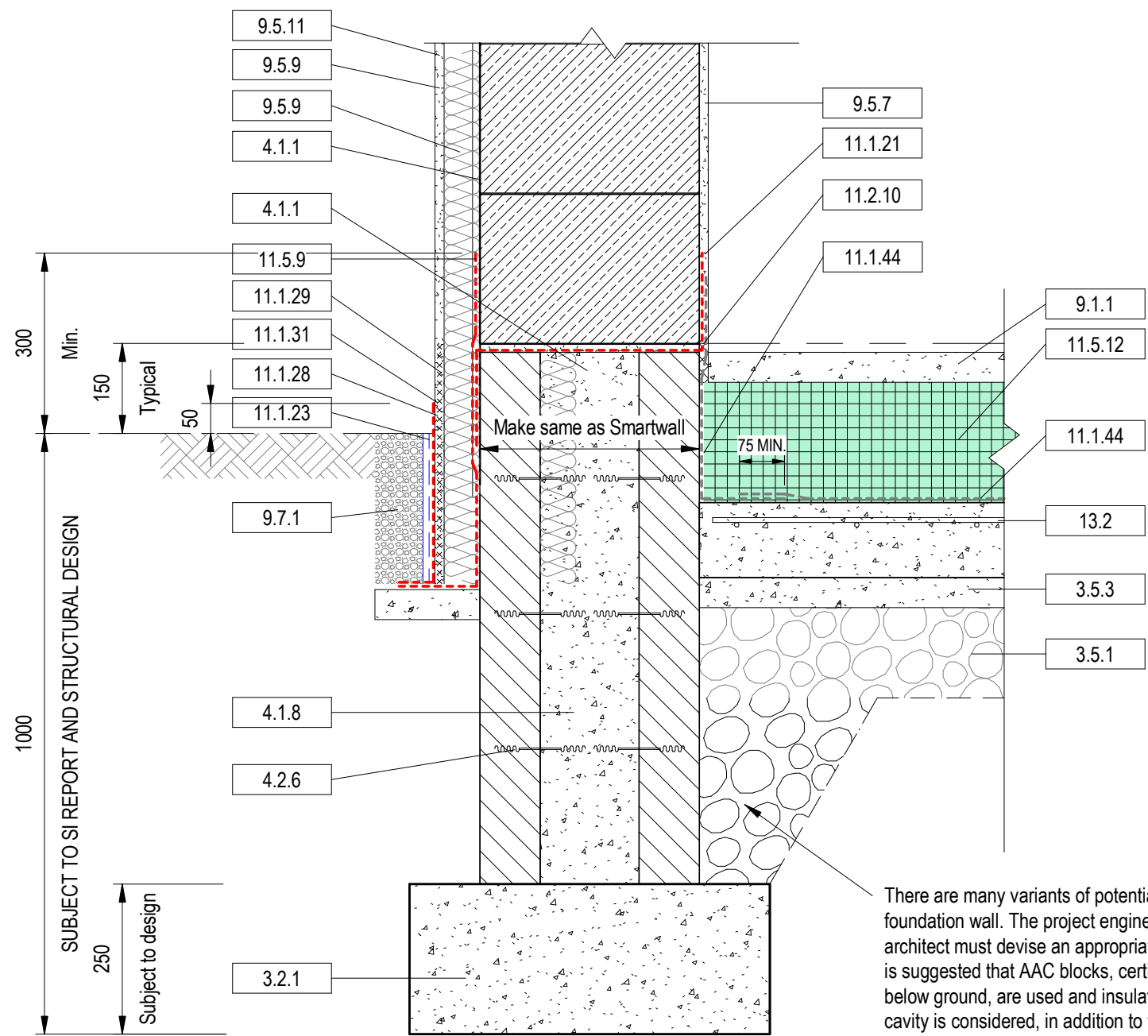
DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 112</b>	REV
--	-----

# 1 WALL BASE ON STRIP FOUNDATION - BEAM & BLOCK

1 : 10


Key	Keynote
3.2.1	Mass concrete, Grade FND2 to BS 8500.
3.5.1	Well compacted granular sub-base material. Min. thickness 150. Where the thickness is greater than 500mm, compact in layers not exceeding 250 deep each and lay alternate layers of lean mix concrete.
3.5.3	Blind with concrete, subject to site conditions, Grade GEN0 to BS8500, min. 50mm thick.
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
4.1.8	Mass concrete infill, Grade FND, between leaves of cavity wall. Cast in projecting ties each side.
4.2.6	Flat generic tie with key, stainless steel.
9.1.1	Concrete screed.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
9.5.11	External decorative finishes as desired. Ensure materials are compatible with render system.
9.7.1	Anti-splash shingle strip.
11.1.21	Waterproofing and Radon-resistant membrane, Remmers MB2K (Art. 301408).
11.1.23	Protective and decoupling sheet, Remmers DS Protect (Art. 082301)
11.1.28	Cementing mortar, Remmers VM Fill (Art. 051725)
11.1.29	Rapid setting adhesive felting mortar, Remmers VM Fill Rapid (Art. 051925)
11.1.31	Mesh render reinforcement, Remmers Tex.
11.1.44	Visqueen GR SAM self-adhesive DPM and radon membrane for applied in accordance with manufacturer's instructions and minimum lap. Compliant with BS 8102 & BS 8485.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.9	Expanded polystyrene batts or boards.
11.5.12	Rigid floor/foundation insulation batts.
13.2	Reinforcement, steel mesh fabric, to BS4483 & BS8666.

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.




Rev	Description	Date

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED  
SMARTWALL™**



EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

TITLE  
**WALL BASE ON STRIP FOOTING - GRD BRG SLAB**

CLIENT

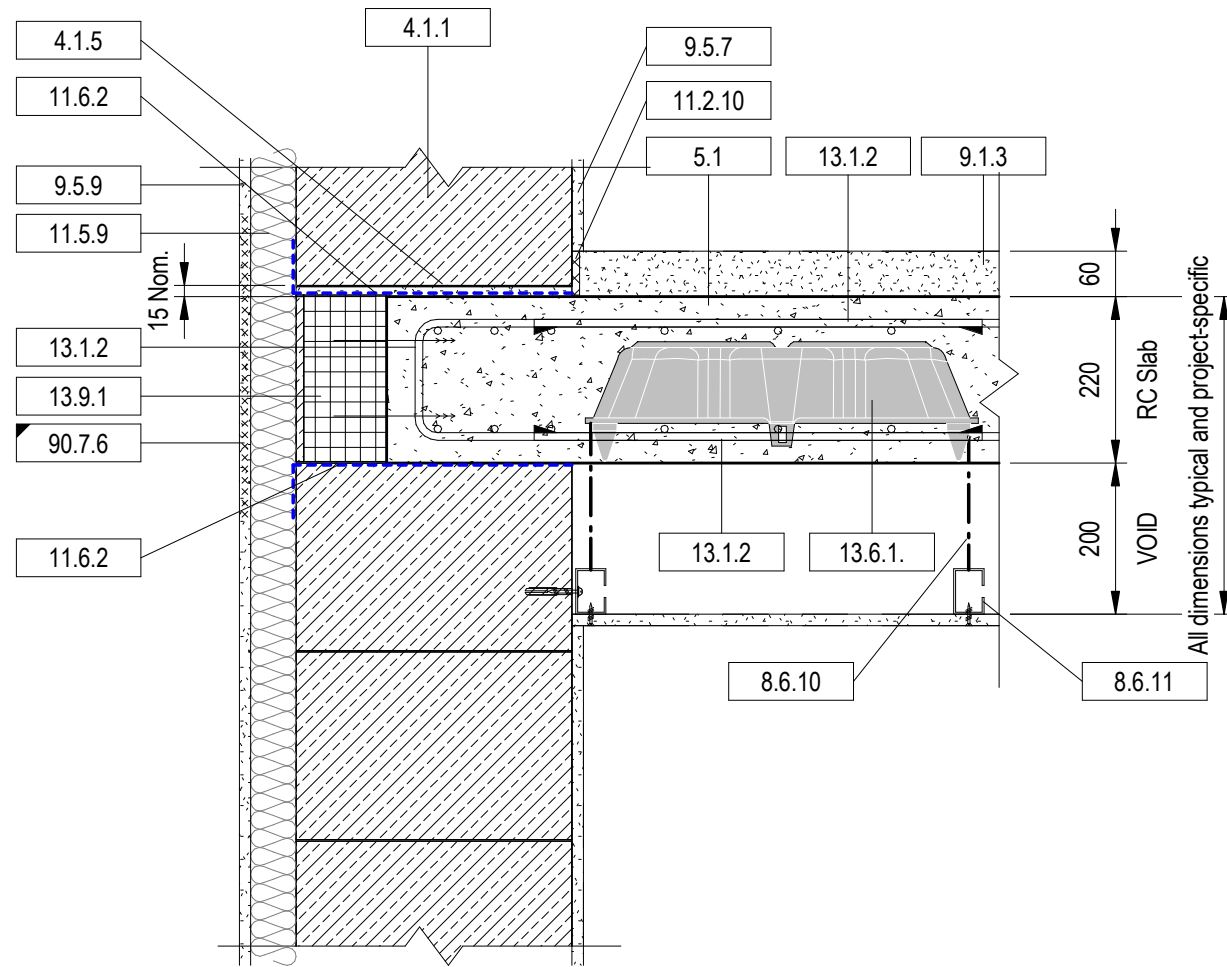
DRAWN BY RAB	CHECKED BY	DATE 06/17/21
-----------------	------------	------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 113</b>	REV
--	-----

# 1 WALL BASE ON STRIP FOUNDATION - GROUND BRG SLAB

1 : 10



Key	Keynote
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
4.1.5	Full thickness bed or leveling bed of insulating mortar,
5.1	Reinforced concrete slab, concrete to BS 8500.
8.6.10	Ceiling hanger rod system fixed to slab or beams. Use elastically isolating type to limit acoustic transmission.
8.6.11	Ceiling hanger channel system fixed to adjustable hangers.
9.1.3	Liquid self compacting concrete screed, Cemfloor Therm or equivalent. Apply in strict accordance with manufacturer's instructions. Provide all necessary movement joints and joint covers.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.9	Expanded polystyrene batts or boards.
11.6.2	Monafloor Wall Cap 400 felt, cut to suit. Turn down wall faces and clip in all separating floors.
13.1.2	Reinforcement Grade B500B or C.
13.6.1.	Geoplast Nautilus EVO void formers.
13.9.1	Juwö DRE Edge former system. Size and type to suit structural thickness and thermal requirements.
90.7.6	Additional band of mesh reinforcement in render at transitions, junctions and joints.

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

# 1 WALL SUPPORTING RC FLOOR

1 : 10


	U <sub>w</sub>	Ψ
	W/m <sup>2</sup> K	W/mK
1) As shown - 365 Smartwall + 60 EWI.	0.147	0.035
2) 490 Smartwall, no EWI.	0.148	0.067

Thermal data based on calculation with d<sub>min</sub>=1.2m, 50mm concrete screed, Smartwall S7.5 block.


Values given are indicative, due to inevitable variation of each project from standard details, and should be superseded by project-specific calculations where precision is critical.

Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED  
SMARTWALL™**

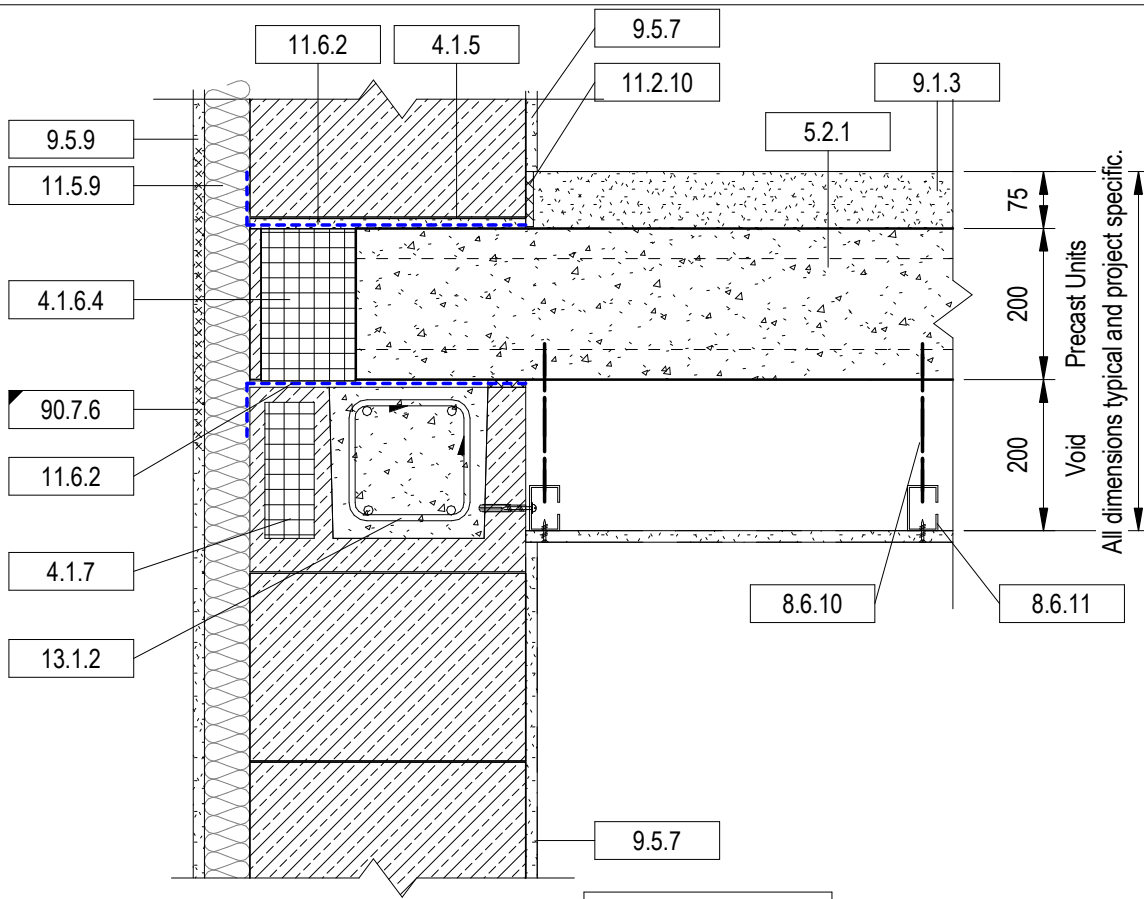


EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

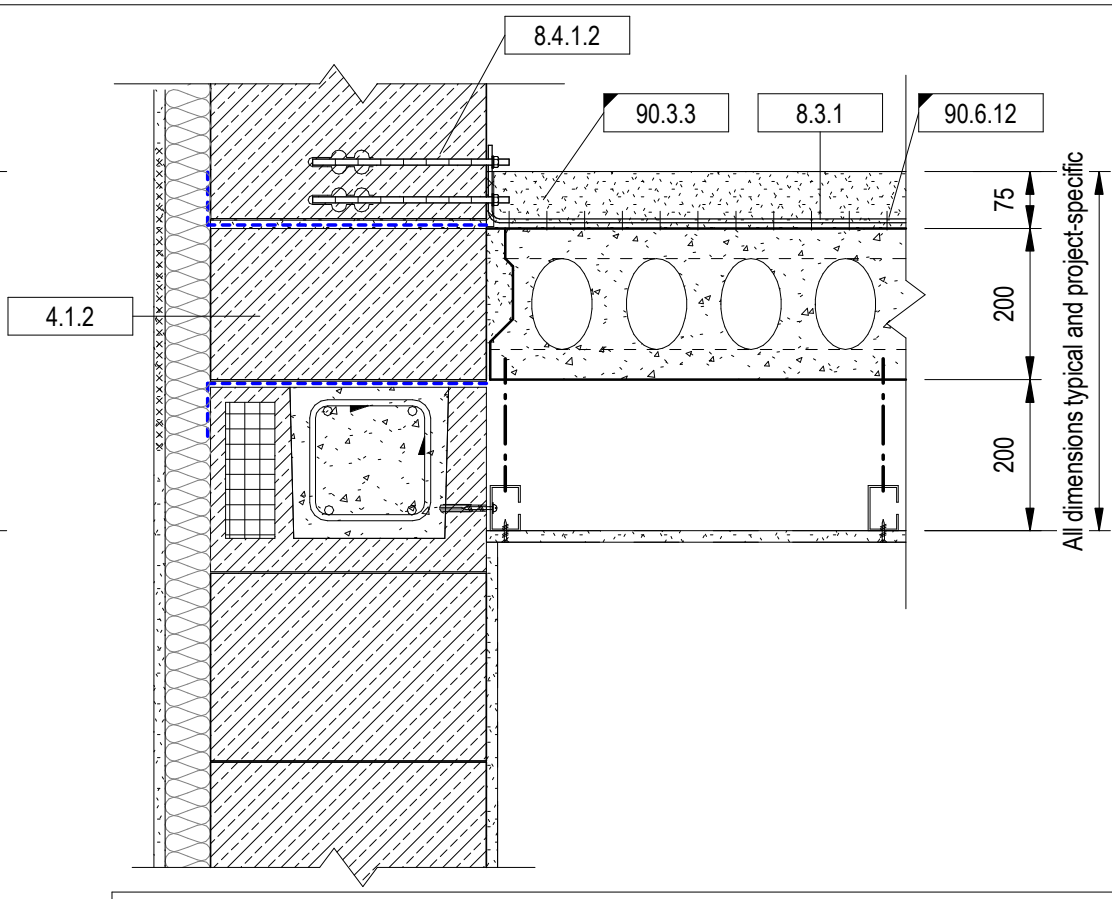
Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT <b>SMARTWALL - TYPICAL DETAILS</b>		
TITLE <b>WALL SUPPORTING RC FLOOR</b>		
CLIENT		
DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
SCALE (@ A3) 1 : 10	PROJECT REF. N/C	
DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 201</b>	REV <b>2</b>	





END VIEW



EDGE VIEW - DETAILS AS END VIEW, EXCEPT AS NOTED

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

# 1 WALL SUPPORTING PRECAST CONCRETE FLOOR (U-BLOCK)

1 : 10

Key	Keynote
4.1.2	Smartwall blocks, half course blocks, in thin bed mortar or adhesive
4.1.5	Full thickness bed or leveling bed of insulating mortar,
4.1.6.4	DeRa-Schale 20 Ultra.
4.1.7	Smartwall U-Block units with RC beam cast in,
5.2.1	Hollow core units.
8.3.1	27.5mm x 5mm galvanized steel perforated strap.
8.4.1.2	Mungo MIT-S (Art. 1720811) M8 x 110 rod, MIT-SH-K2 sleeve (Art. 1710145).
8.6.10	Ceiling hanger rod system fixed to slab or beams. Use elastically isolating type to limit acoustic transmission.
8.6.11	Ceiling hanger channel system fixed to adjustable hangers.
9.1.3	Liquid self compacting concrete screed, Cemfloor Therm or equivalent. Apply in strict accordance with manufacturer's instructions. Provide all necessary movement joints and joint covers.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.9	Expanded polystyrene batts or boards.
11.6.2	Monafloor Wall Cap 400 felt, cut to suit. Turn down wall faces and clip in all separating floors.
13.1.2	Reinforcement Grade B500B or C.
90.3.3	Where structural units are cambered (pre-cast hollow-core units), ensure depth of screed is sufficient to accommodate variation in depth along camber whilst maintaining minimum thickness.
90.6.12	Plug and screw restraint straps to top of units at max. 1200mm c/c and anchor bolt to wall with two fixings per strap. Min strap length 1000mm and min 12g x 60 screws per strap into units.
90.7.6	Additional band of mesh reinforcement in render at transitions, junctions and joints.

Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED SMARTWALL™**



EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

TITLE  
**WALL SUPPORTING PRECAST FLOOR (U-BLOCK)**

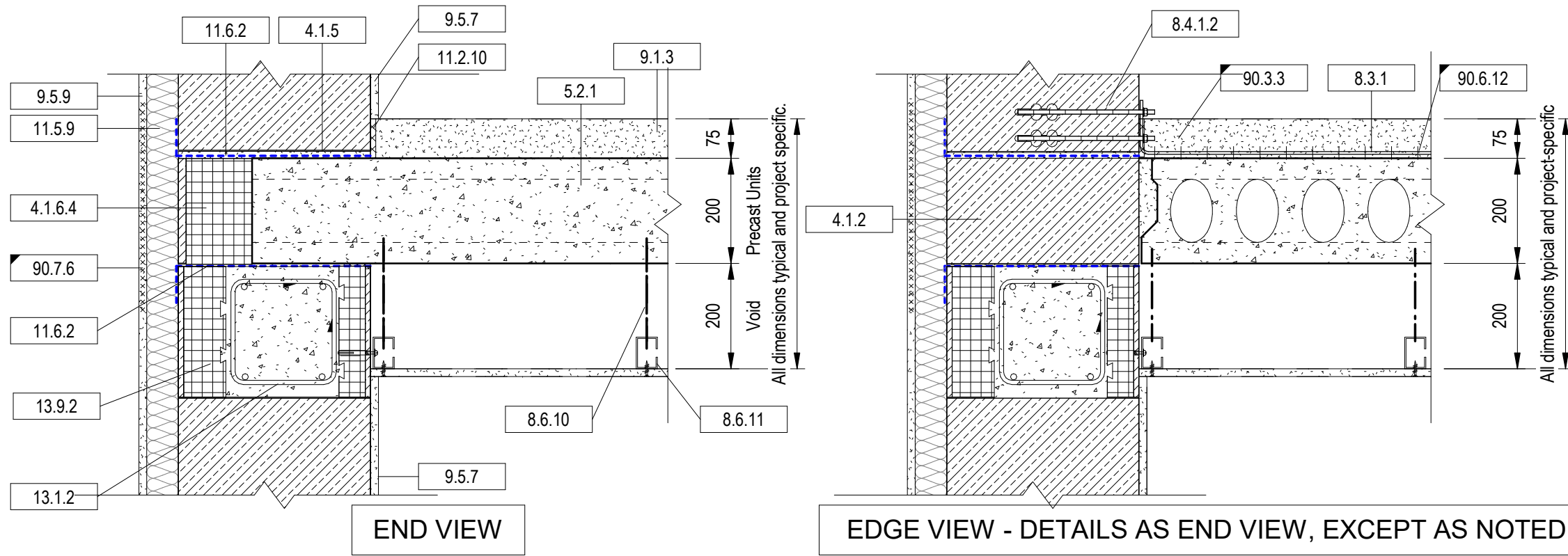
CLIENT

DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 202</b>	REV <b>2</b>
--	-----------------

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.



# 1 WALL SUPPORTING PRECAST CONCRETE FLOOR (DRE)

1 : 10

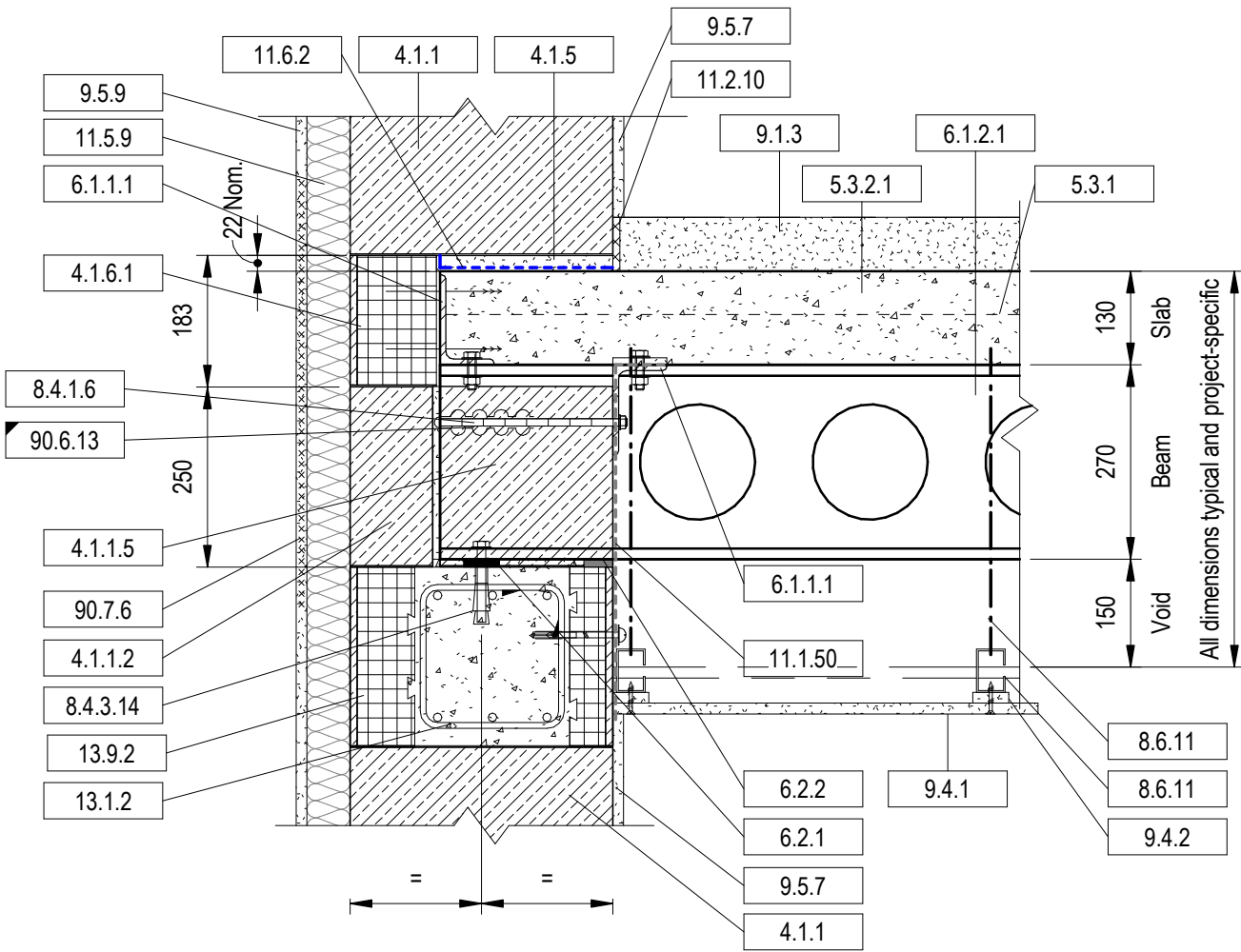
Key	Keynote
4.1.2	Smartwall blocks, half course blocks, in thin bed mortar or adhesive
4.1.5	Full thickness bed or leveling bed of insulating mortar,
4.1.6.4	DeRa-Schale 20 Ultra.
5.2.1	Hollow core units.
8.3.1	27.5mm x 5mm galvanized steel perforated strap.
8.4.1.2	Mungo MIT-S (Art. 1720811) M8 x 110 rod, MIT-SH-K2 sleeve (Art. 1710145).
8.6.10	Ceiling hanger rod system fixed to slab or beams. Use elastically isolating type to limit acoustic transmission.
8.6.11	Ceiling hanger channel system fixed to adjustable hangers.
9.1.3	Liquid self compacting concrete screed, Cemfloor Therm or equivalent. Apply in strict accordance with manufacturer's instructions. Provide all necessary movement joints and joint covers.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.9	Expanded polystyrene batts or boards.
11.6.2	Monaflor Wall Cap 400 felt, cut to suit. Turn down wall faces and clip in all separating floors.
13.1.2	Reinforcement Grade B500B or C.
13.9.2	Juwö DRE+ Edge former system. Size and type to suit structural thickness and thermal requirements. Comprising inside and outside units and RC Grade C30/37 beam infill.
90.3.3	Where structural units are cambered (pre-cast hollow-core units), ensure depth of screed is sufficient to accommodate variation in depth along camber whilst maintaining minimum thickness.
90.6.12	Plug and screw restraint straps to top of units at max. 1200mm c/c and anchor bolt to wall with two fixings per strap. Min strap length 1000mm and min 12g x 60 screws per strap into units.
90.7.6	Additional band of mesh reinforcement in render at transitions, junctions and joints.

Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT <b>SMARTWALL - TYPICAL DETAILS</b>		
TITLE <b>WALL SUPPORTING PRECAST FLOOR (DRE)</b>		
CLIENT		
DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
SCALE (@ A3) 1 : 10	PROJECT REF. N/C	
DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 203</b>	REV <b>2</b>	



Key	Keynote
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
4.1.1.2	115mm thick.
4.1.1.5	190mm thick.
4.1.5	Full thickness bed or leveling bed of insulating mortar,
4.1.6.1	DeRa-Schale 18 Plus.
5.3.1	Profiled metal decking.
5.3.2.1	130mm thick.
6.1.1.1	125x75x8L.
6.1.2.1	Cellular beam, Grade S355 steel according to design and details and fabricator's/manufacturer's details.
6.2.1	Beam bearing on steel shim, min. 50 wide, Surround in bedding grout.
6.2.2	Resilient strip of bituminous felt or foam at bearing, nom. 40 wide.
8.4.1.6	Mungo MIT-S (Art. 1721015) M10 x 150 rod, MIT-SH-K2 sleeve (Art. 1710150).
8.4.3.14	Mungo M1t (Art. 3601212) M12 x 120/20
8.6.11	Ceiling hanger channel system fixed to adjustable hangers.
9.1.3	Liquid self compacting concrete screed, Cemfloor Therm or equivalent. Apply in strict accordance with manufacturer's instructions. Provide all necessary movement joints and joint covers.
9.4.1	Min. 30 minute fire resisting ceiling construction, based on gypsum or similar boards on metal framing system.
9.4.2	Fibre-cement or Fermacell strips to close joints. Details by specialist contractor.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
11.1.50	Blowerproof liquid parging/sealing, brush or spray applied, behind any fittings and penetrations or face-fixed components.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.9	Expanded polystyrene batts or boards.
11.6.2	Monafloor Wall Cap 400 felt, cut to suit. Turn down wall faces and clip in all separating floors.
13.1.2	Reinforcement Grade B500B or C.
13.9.2	Juwö DRE+ Edge former system. Size and type to suit structural thickness and thermal requirements. Comprising inside and outside units and RC Grade C30/37 beam infill.
90.6.13	Position anchor bolts at nom. 500c/c. Steelwork must be pre-drilled. Do not fix into joints or close to edge of blocks.
90.7.6	Additional band of mesh reinforcement in render at transitions, junctions and joints.

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED  
SMARTWALL™**



EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

TITLE  
**WALL SUPPORTING STEEL FRAMED FLOOR (1)**

CLIENT

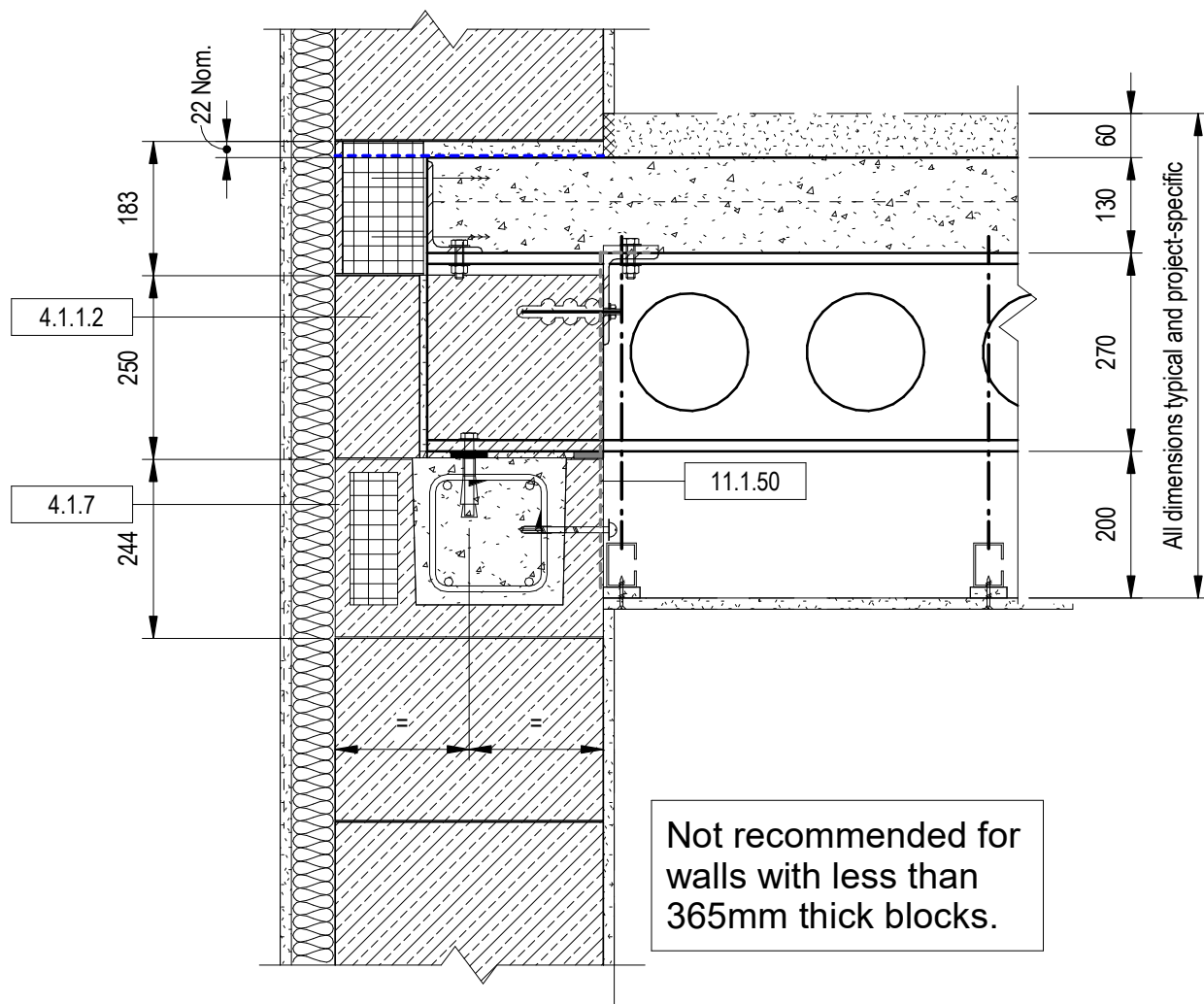
DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 204</b>	REV <b>2</b>
--	-----------------

# 1 WALL SUPPORTING STEEL FRAMED FLOOR - 1

1 : 10



Key	Keynote
4.1.1.2	115mm thick.
4.1.7	Smartwall U-Block units with RC beam cast in,
11.1.50	Blowerproof liquid parging/sealing, brush or spray applied, behind any fittings and penetrations or face-fixed components.

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
 NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------

# 1 WALL SUPPORTING STEEL FRAMED FLOOR - 2

1 : 10

ALL NOTES AND DETAILS AS GENERAL DETAIL, DRAWING 204, EXCEPT AS SHOWN.

EVOLVED SUPPLIES LTD  
 4 Firs Close, St Martins, SY11 3LT.  
 Tel: +44 (0)1691 707 100  
 info@evolvedsupplies.co.uk  
 www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
 SMARTWALL - TYPICAL DETAILS

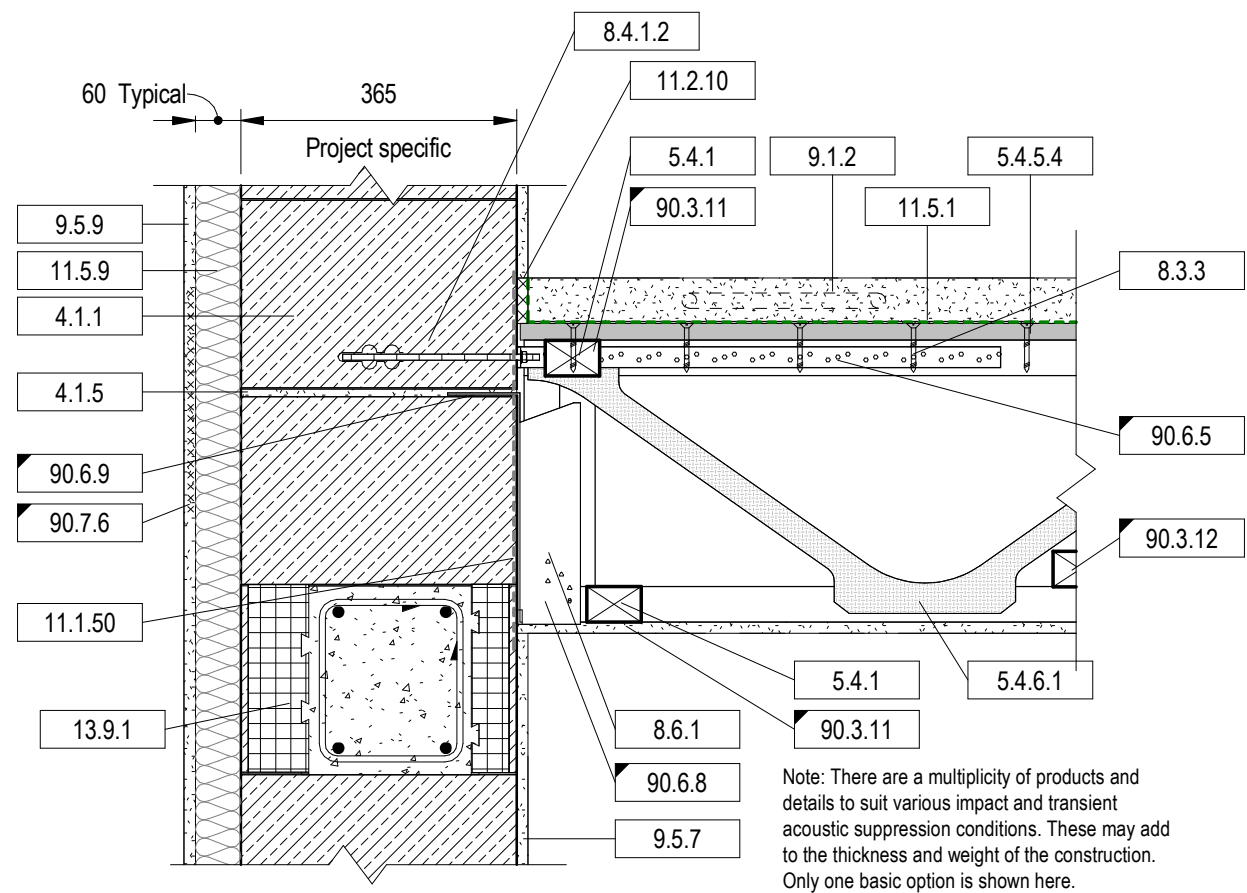
TITLE  
 WALL SUPPORTING STEEL FRAMED FLOOR (2)

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER 0000-ESJ-ZZ-00-DR-S - 205	REV 2
---	----------



Key	Keynote
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
4.1.5	Full thickness bed or leveling bed of insulating mortar,
5.4.1	Timber, softwood.
5.4.5.4	OSB3 floor boarding, 22 thick, nailed or screwed at max. 150c/c. Ensure all ends and edges are supported. Fix additional headers and noggings as necessary.
5.4.6.1	Metal web joists, design and details by specialist supplier, spacing as shown.
8.3.3	27.5mm x 2.55mm galvanized steel perforated strap.
8.4.1.2	Mungo MIT-S (Art. 1720811) M8 x 110 rod, MIT-SH-K2 sleeve (Art. 1710145).
8.6.1	Joist hanger.
9.1.2	Anhydrite screed, Gypsol TimBRE or equivalent. Apply in strict accordance with manufacturer's instructions. Provide all necessary movement joints and joint covers.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
11.1.50	Blowerproof liquid parging/sealing, brush or spray applied, behind any fittings and penetrations or face-fixed components.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.1	Floor screed PE isolation/uncoupling membrane, or Termofol UFH underlay for enhanced performance.
11.5.9	Expanded polystyrene batts or boards.
13.9.1	Juwö DRE Edge former system. Size and type to suit structural thickness and thermal requirements.
90.3.11	Fix edge noggings to wall to joists using Z-clips as manufacturer's instructions.
90.3.12	Fix strong-backs as manufacturer's instructions and fix strap over at least 3(No.) joists.
90.6.5	Fix straps both sides, screw/nail to timber as manufacturer's instructions and anchor bolt to masonry. For fixings larger than holes, carefully re-drill holes to suit (Carry out on bench with strap clamped down or in vice and suitable drill),
90.6.8	Nail and/or screw fitting in accordance with manufacturer's instructions. Fix all holes by default, unless specified to the contrary.
90.6.9	Where hangers are not face fixed, grind/rasp out recess in block below tail of hanger, or position in full mortar bed joint, min 10mm thick. Completely embed tail in grout/mortar. Parge wall before fitting hanger and seal/parge around components after fitting. For face-fixed hangers seal/parge similarly, but see engineer's details for fixings.
90.7.6	Additional band of mesh reinforcement in render at transitions, junctions and joints.

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

# 1 WALL SUPPORTING TIMBER FLOOR - 1

1 : 10

	U <sub>w</sub>	Ψ
	W/m²K	W/mK
1) 365 Smartwall + 60 EWI - no DRE.	0.147	≈ 0
2) As 1 + DRE ring beam under.	0.147	0.021
3) 490 Smartwall, no EWI.	0.148	≈ 0
4) As 3 + DRE ring beam under.	0.148	0.030

Thermal data based on calculation with d<sub>min</sub>=1.2m, 50mm concrete screed, Smartwall S7.5 block.

Values given are indicative, due to inevitable variation of each project from standard details, and should be superseded by project-specific calculations where precision is critical.

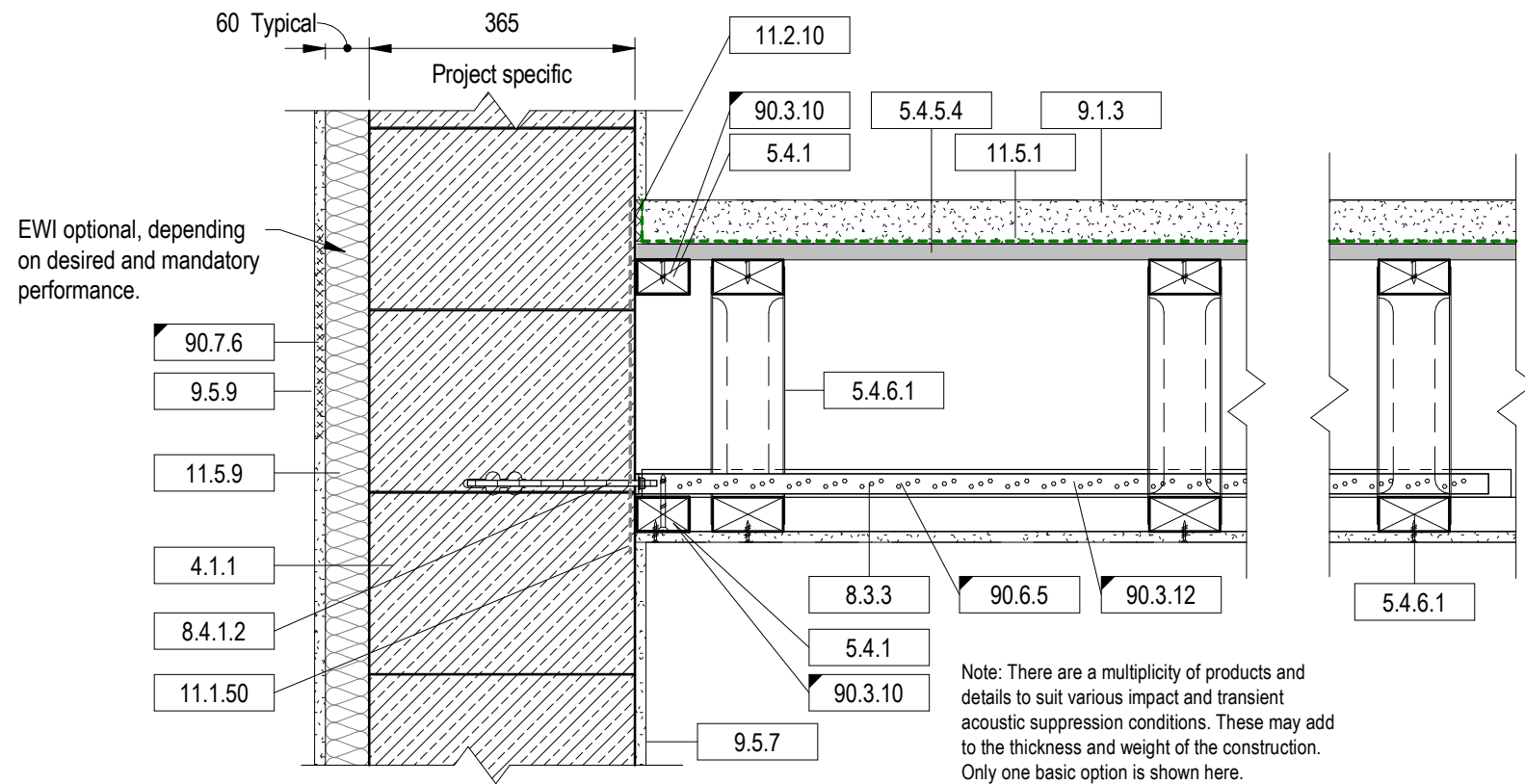
Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------

EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT SMARTWALL - TYPICAL DETAILS		
TITLE WALL SUPPORTING TIMBER FLOOR (1)		
CLIENT		
DRAWN BY RAB	CHECKED BY	DATE 07/15/20
SCALE (@ A3) 1 : 10	PROJECT REF. N/C	
DRAWING NUMBER 0000-ESJ-ZZ-00-DR-S - 206	REV 2	



ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.


# 1 WALL SUPPORTING TIMBER FLOOR - 2

1 : 10


Key	Keynote
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
5.4.1	Timber, softwood.
5.4.5.4	OSB3 floor boarding, 22 thick, nailed or screwed at max. 150c/c. Ensure all ends and edges are supported. Fix additional headers and noggings as necessary.
5.4.6.1	Metal web joists, design and details by specialist supplier, spacing as shown.
8.3.3	27.5mm x 2.55mm galvanized steel perforated strap.
8.4.1.2	Mungo MIT-S (Art. 1720811) M8 x 110 rod, MIT-SH-K2 sleeve (Art. 1710145).
9.1.3	Liquid self compacting concrete screed, Cemfloor Therm or equivalent. Apply in strict accordance with manufacturer's instructions. Provide all necessary movement joints and joint covers.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
11.1.50	Blowerproof liquid parging/sealing, brush or spray applied, behind any fittings and penetrations or face-fixed components.
11.2.10	Rothoblaas Kenaf Band isolating/sealing strip.
11.5.1	Floor screed PE isolation/uncoupling membrane, or Termofol UFH underlay for enhanced performance.
11.5.9	Expanded polystyrene batts or boards.
90.3.10	Fix edge noggings to wall to support flooring and ceiling.
90.3.12	Fix strong-backs as manufacturer's instructions and fix strap over at least 3(No.) joists.
90.6.5	Fix straps both sides, screw/nail to timber as manufacturer's instructions and anchor bolt to masonry. For fixings larger than holes, carefully re-drill holes to suit (Carry out on bench with strap clamped down or in vice and suitable drill),
90.7.6	Additional band of mesh reinforcement in render at transitions, junctions and joints.

Rev	Description	Date
1	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED SMARTWALL™**



EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

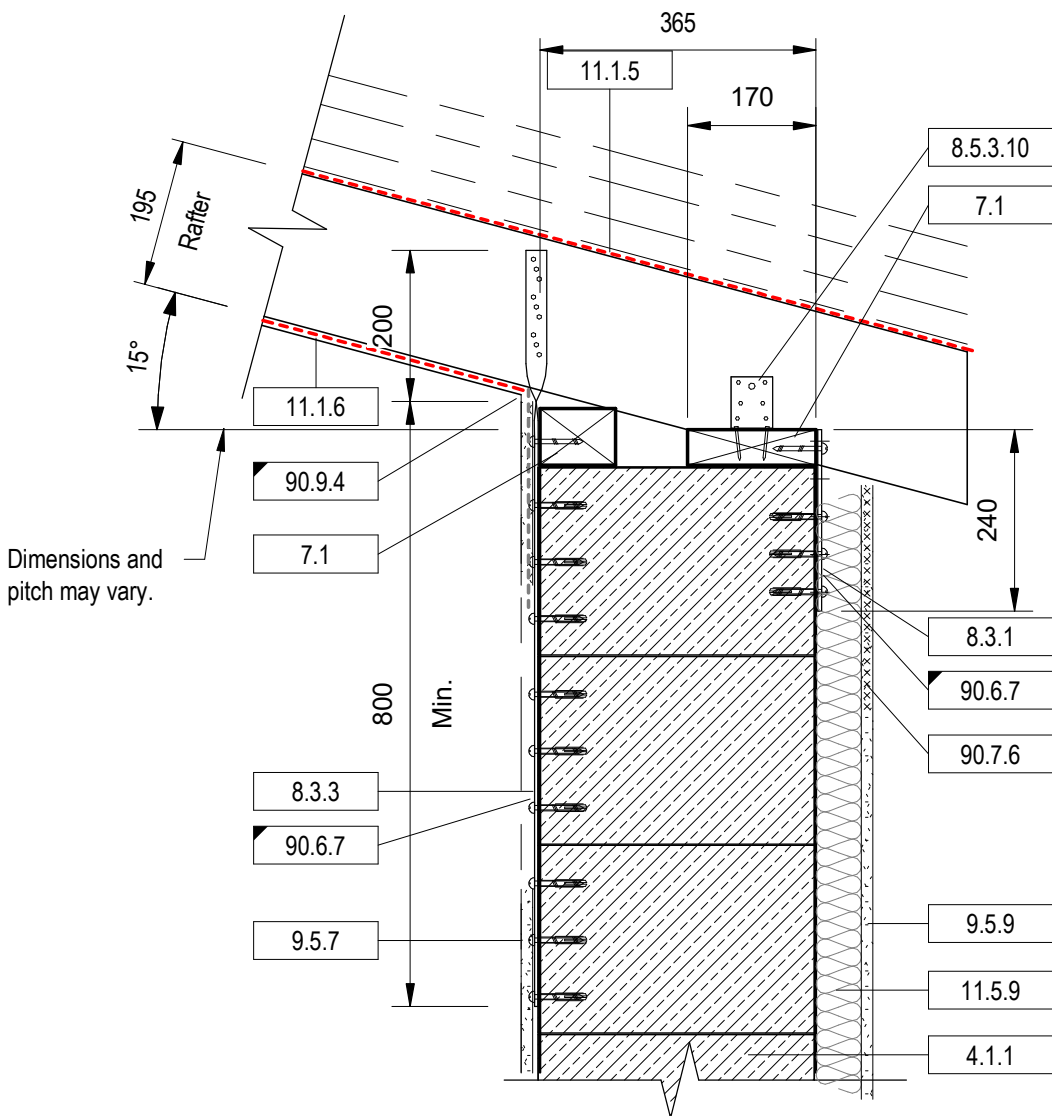
TITLE  
**WALL SUPPORTING TIMBER FLOOR (2)**

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 07/18/20
-----------------	------------	------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 207</b>	REV <b>1</b>
--	-----------------



Dimensions and pitch may vary.

Key	Keynote
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
7.1	Timber, softwood.
8.3.1	27.5mm x 5mm galvanized steel perforated strap.
8.3.3	27.5mm x 2.55mm galvanized steel perforated strap.
8.5.3.10	Rothoblaas NOWB0070 angle.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
11.1.5	Rothoblaas Traspir 170 breathable sarking membrane.
11.1.6	Rothoblaas Barrier Alu 150 membrane.
11.5.9	Expanded polystyrene batts or boards.
90.6.7	Fix strap to face at max 1m c/c, screw/nail to timber as manufacturer's instructions and plug & screw to masonry.
90.7.6	Additional band of mesh reinforcement in render at transitions, junctions and joints.
90.9.4	Tape all edges and laps.

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------

EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
SMARTWALL - TYPICAL DETAILS

TITLE  
RAFTER BEARING ON SMARTWALL

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

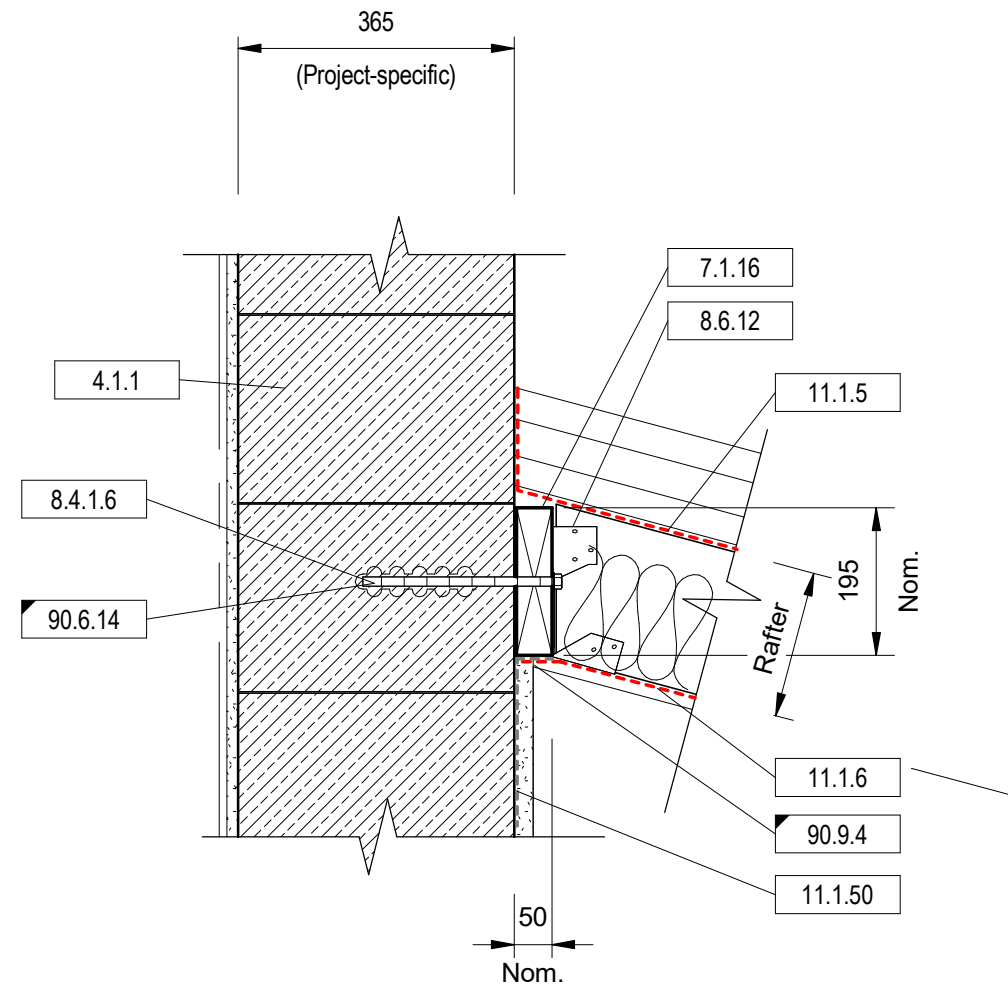
SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER 0000-ESJ-ZZ-00-DR-S - 301	REV 2
---	----------

# 1 WALL PLATE AT EAVES - VAULTED ROOF

1 : 10

Key	Keynote
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
7.1.16	Ledger, SW Grade C24.
8.4.1.6	Mungo MIT-S (Art. 1721015) M10 x 150 rod, MIT-SH-K2 sleeve (Art. 1710150).
8.6.12	Cullen VRC variable ridge connector, handing to suit.
11.1.5	Rothoblaas Traspir 170 breathable sarking membrane.
11.1.6	Rothoblaas Barrier Alu 150 membrane.
11.1.50	Blowerproof liquid parging/sealing, brush or spray applied, behind any fittings and penetrations or face-fixed components.
90.6.14	Position anchor bolts at max. 250c/c. Do not fix into joints or close to edge of blocks. Stagger rows where possible.
90.9.4	Tape all edges and laps.



ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED SMARTWALL™**



EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

TITLE  
**RAFTER BEARING ON SMARTWALL - LEDGER**

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 302</b>	REV <b>2</b>
--	-----------------

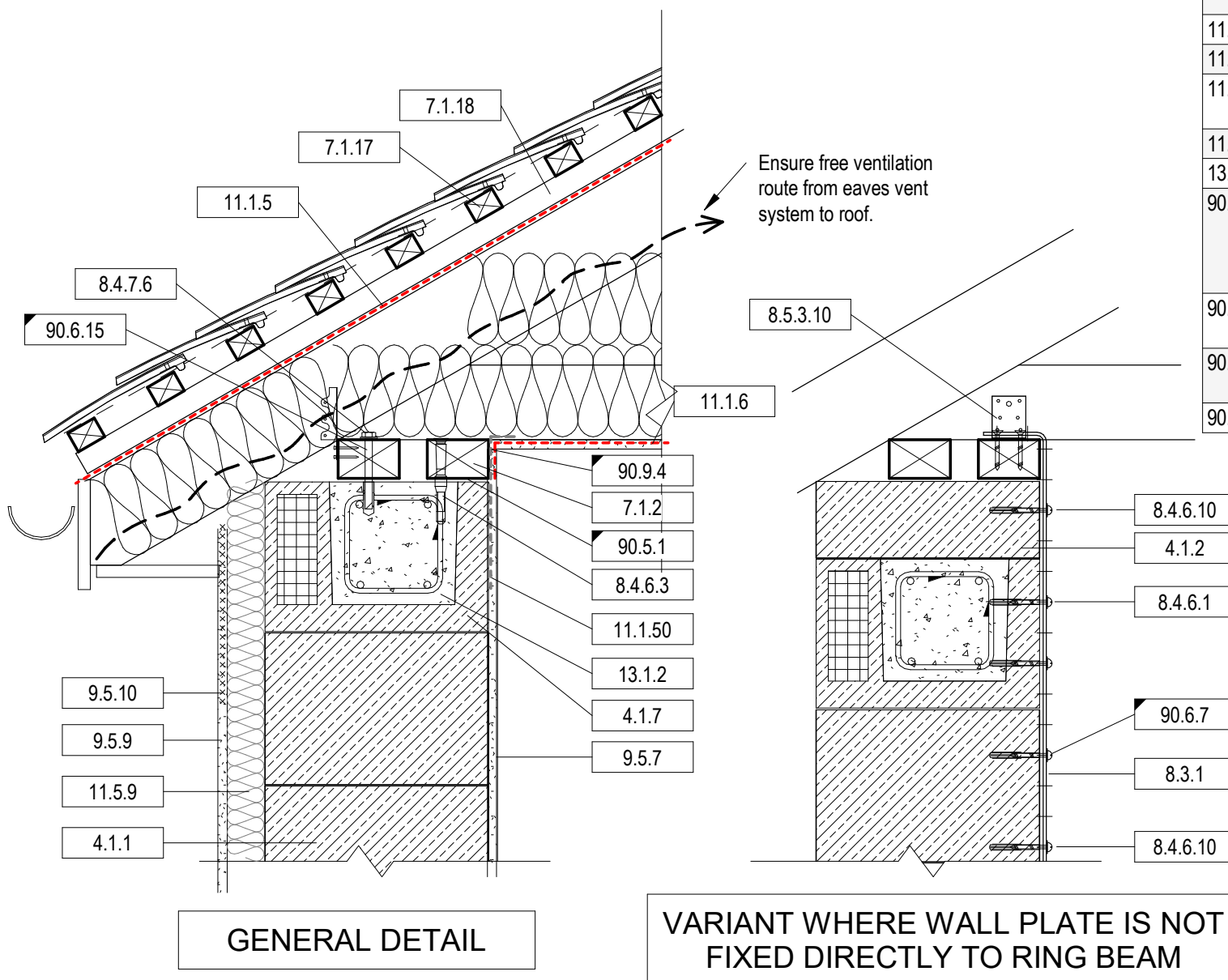
# 1 RAFTER SUPPORT ON LEDGER

1 : 10



ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Key	Keynote
4.1.1	Smartwall blocks in thin bed mortar or adhesive,
4.1.2	Smartwall blocks, half course blocks, in thin bed mortar or adhesive
4.1.7	Smartwall U-Block units with RC beam cast in,
7.1.2	Plate, SW Grade C24.
7.1.17	Battens Grade C16 or C24.
7.1.18	Counter-battens Grade C16 or C24.
8.3.1	27.5mm x 5mm galvanized steel perforated strap.
8.4.6.1	Mungo MU plug (Art. 1010850) 8x50 and Rothoblaas HBS Ø8 screw, length to suit.
8.4.6.3	Mungo MU plug (Art. 1011270) 12x70 and Rothoblaas KOP Ø10 screw, length to suit.
8.4.6.10	Mungo ML plug (Art. 11011009) 10x90 and Rothoblaas Ø6 screw, length to suit.
8.4.7.6	Mungo MCS-S Concrete screw (Art. 55011211) 12x110.
8.5.3.10	Rothoblaas NOWB0070 angle.
9.5.7	Plaster, lime based.
9.5.9	External render system with alkali resistant reinforcing mesh at joints edges and transitions, as recommended by manufacturer.
9.5.10	External render system below DPC line - 5mm thick JLM base coat with extra layer of reinforcing mesh and top coat of 3mm thick Hidrozol Superflex. Finish as topcoat or approved paint.
11.1.5	Rothoblaas Traspir 170 breathable sarking membrane.
11.1.6	Rothoblaas Barrier Alu 150 membrane.
11.1.50	Blowerproof liquid parging/sealing, brush or spray applied, behind any fittings and penetrations or face-fixed components.
11.5.9	Expanded polystyrene batts or boards.
13.1.2	Reinforcement Grade B500B or C.
90.5.1	If coursing blocks are required to suit desired roof height, and roof cannot be fixed directly to ring beam, ensure roof structure is tied down with appropriate straps to the wall - min. 27.5x5 galv. steel straps at max. 1m c/c.
90.6.7	Fix strap to face at max 1m c/c, screw/nail to timber as manufacturer's instructions and plug & screw to masonry.
90.6.15	Position anchor bolts at max. 500c/c. Do not fix into joints or close to edge of blocks. Stagger rows where possible.
90.9.4	Tape all edges and laps.



# 1 WALL SUPPORTING TRUSS-RAFTERS

1 : 10

Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

TITLE  
**WALL SUPPORTING TRUSS-RAFTERS (COLD ROOF)**

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

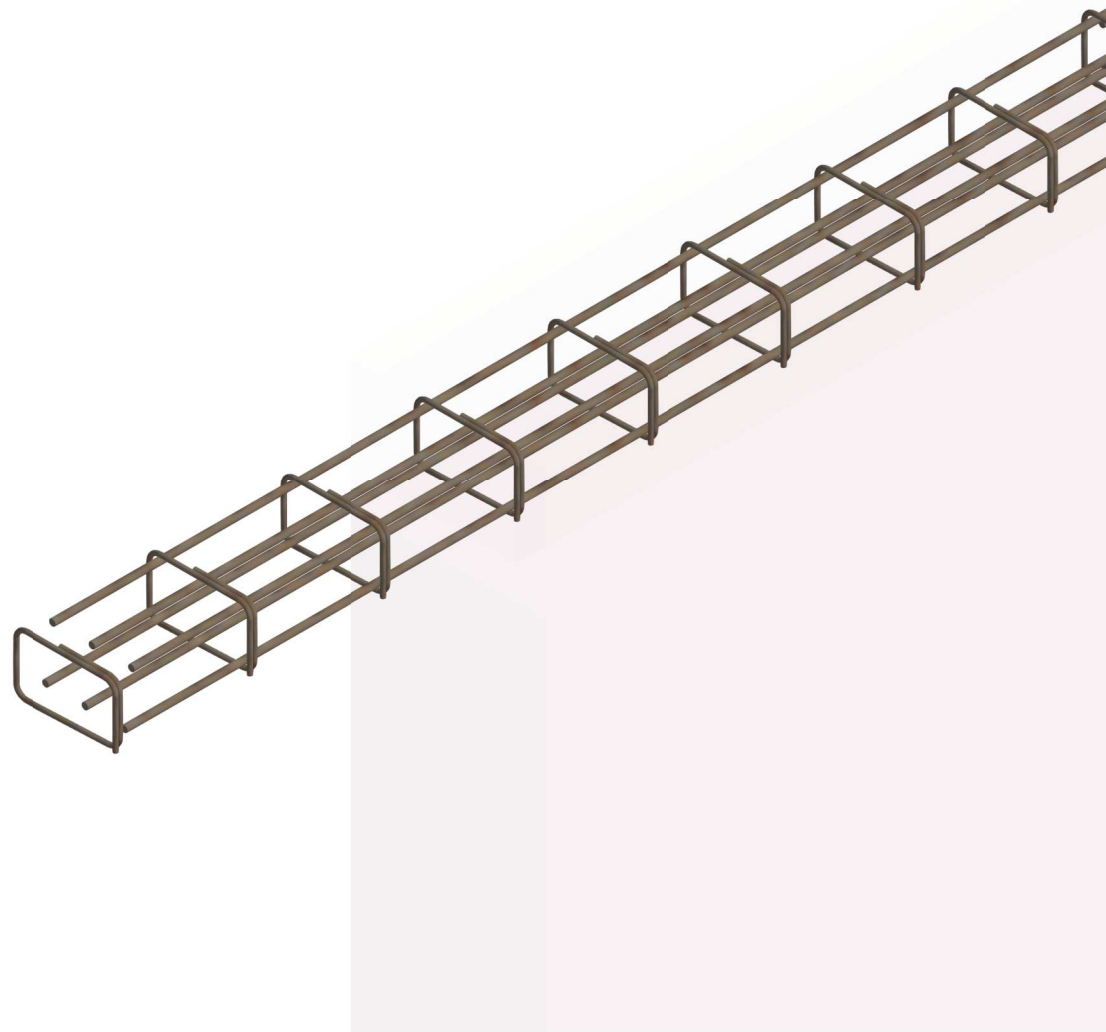
SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 303</b>	REV <b>2</b>
--	-----------------

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

THIS DETAIL APPLIES TO SMARTWALL WITH U-BLOCK WITH THICKNESS OF SMARTWALL 365 AND GREATER.

OTHER SMARTWALL THICKNESSES SIMILAR BUT AS DETAILED ELSEWHERE.



**1 TYPICAL RING BEAM REINFORCEMENT - 365 SMARTWALL**

Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------

EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
SMARTWALL - TYPICAL DETAILS

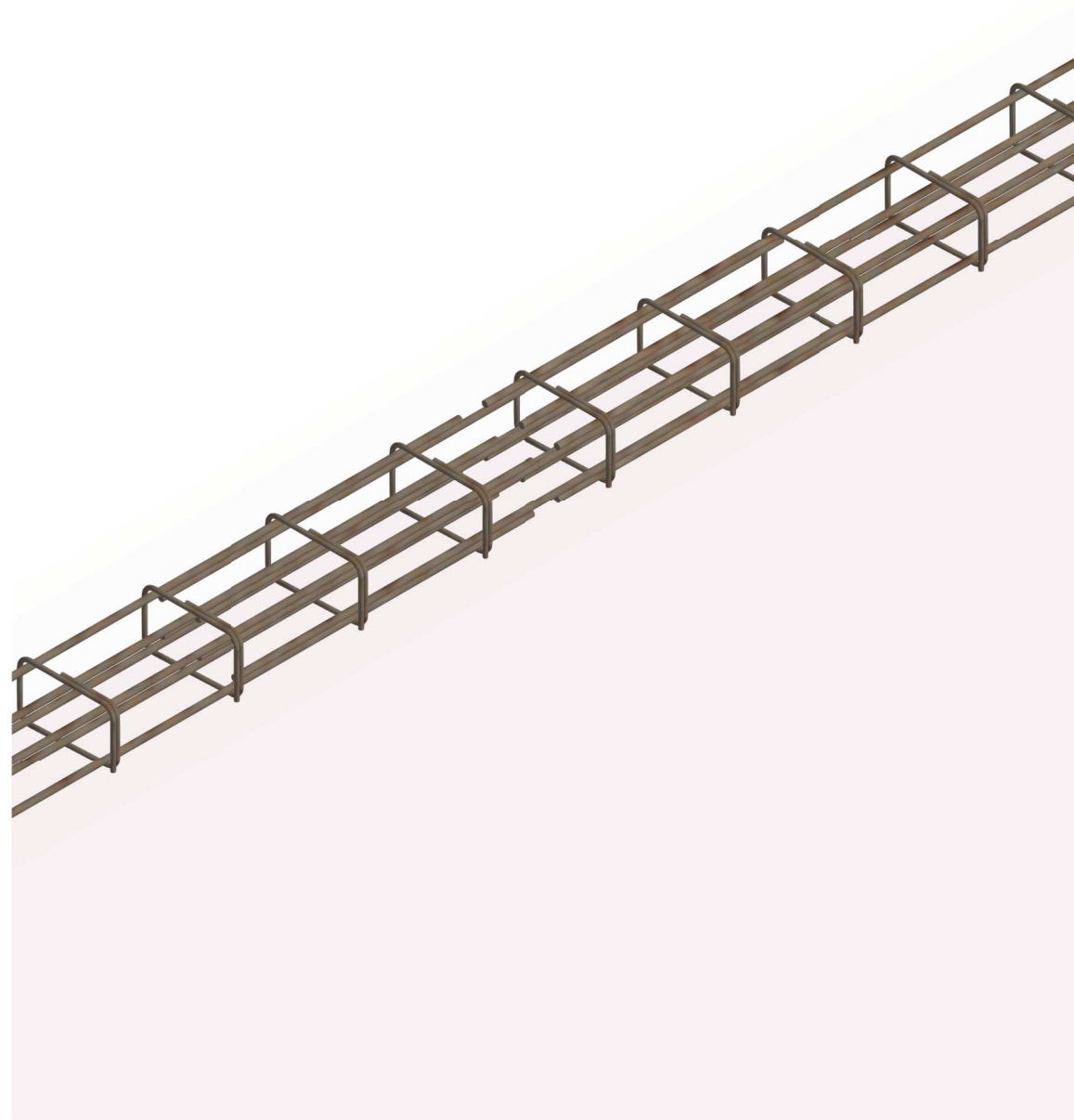
TITLE  
RING BEAM REINFORCEMENT - 365 SMARTWALL

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

SCALE (@ A3)	PROJECT REF. N/C
--------------	---------------------

DRAWING NUMBER 0000-ESJ-ZZ-00-DR-S - 501	REV 2
---	----------



1

## RING BEAM REINFORCEMENT LAP - 365 SMARTWALL

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

THIS DETAIL APPLIES TO SMARTWALL WITH U-BLOCK WITH THICKNESS OF SMARTWALL 365 AND GREATER.

OTHER SMARTWALL THICKNESSES SIMILAR BUT AS DETAILED ELSEWHERE.

Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
SMARTWALL - TYPICAL DETAILS

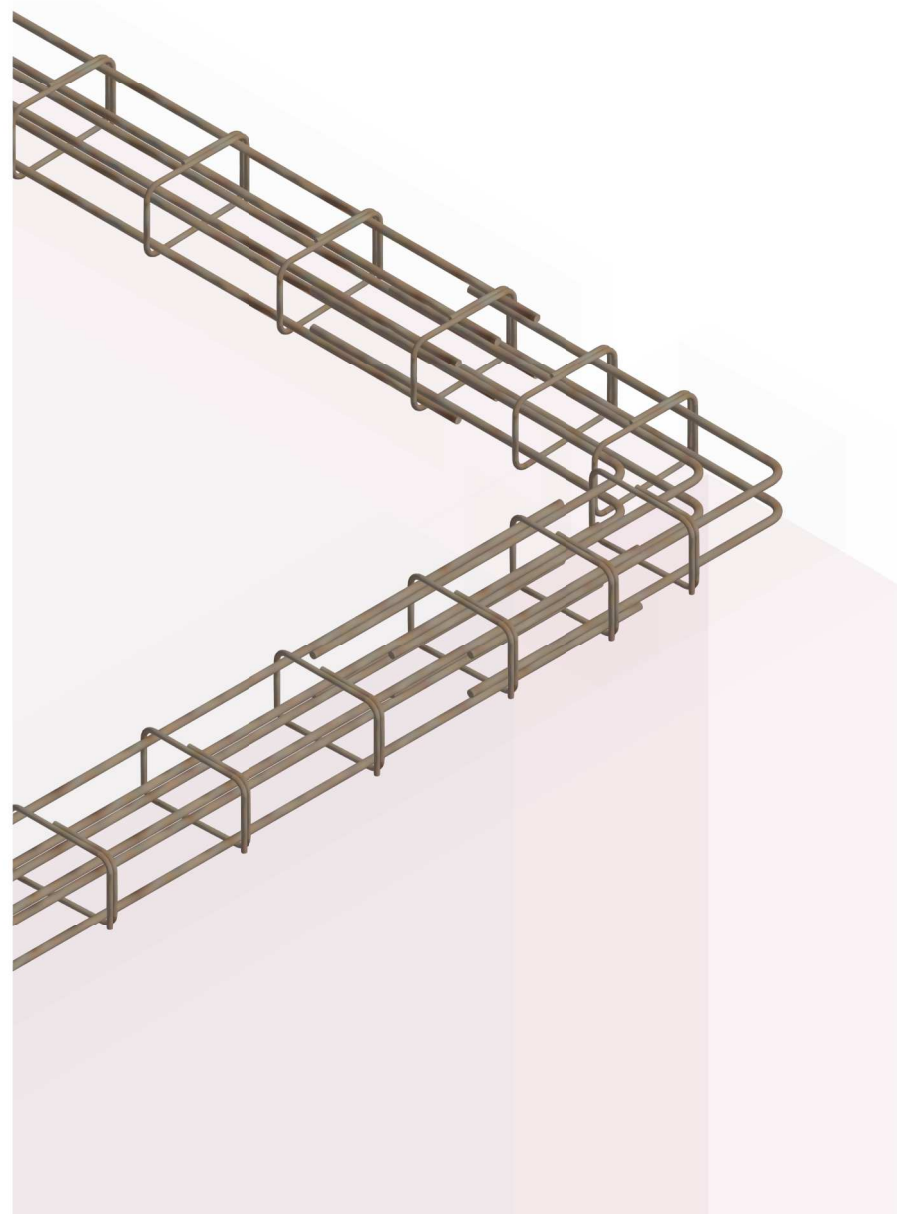
TITLE  
RING BEAM REINFORCEMENT - 365 SMARTWALL

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

SCALE (@ A3)	PROJECT REF. N/C
--------------	---------------------

DRAWING NUMBER 0000-ESJ-ZZ-00-DR-S - 502	REV 2
---	----------



1

## TYPICAL RING BEAM CORNER - 365 SMARTWALL

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

THIS DETAIL APPLIES TO SMARTWALL WITH U-BLOCK WITH THICKNESS OF SMARTWALL 365 AND GREATER.

OTHER SMARTWALL THICKNESSES SIMILAR BUT AS DETAILED ELSEWHERE.

Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
SMARTWALL - TYPICAL DETAILS

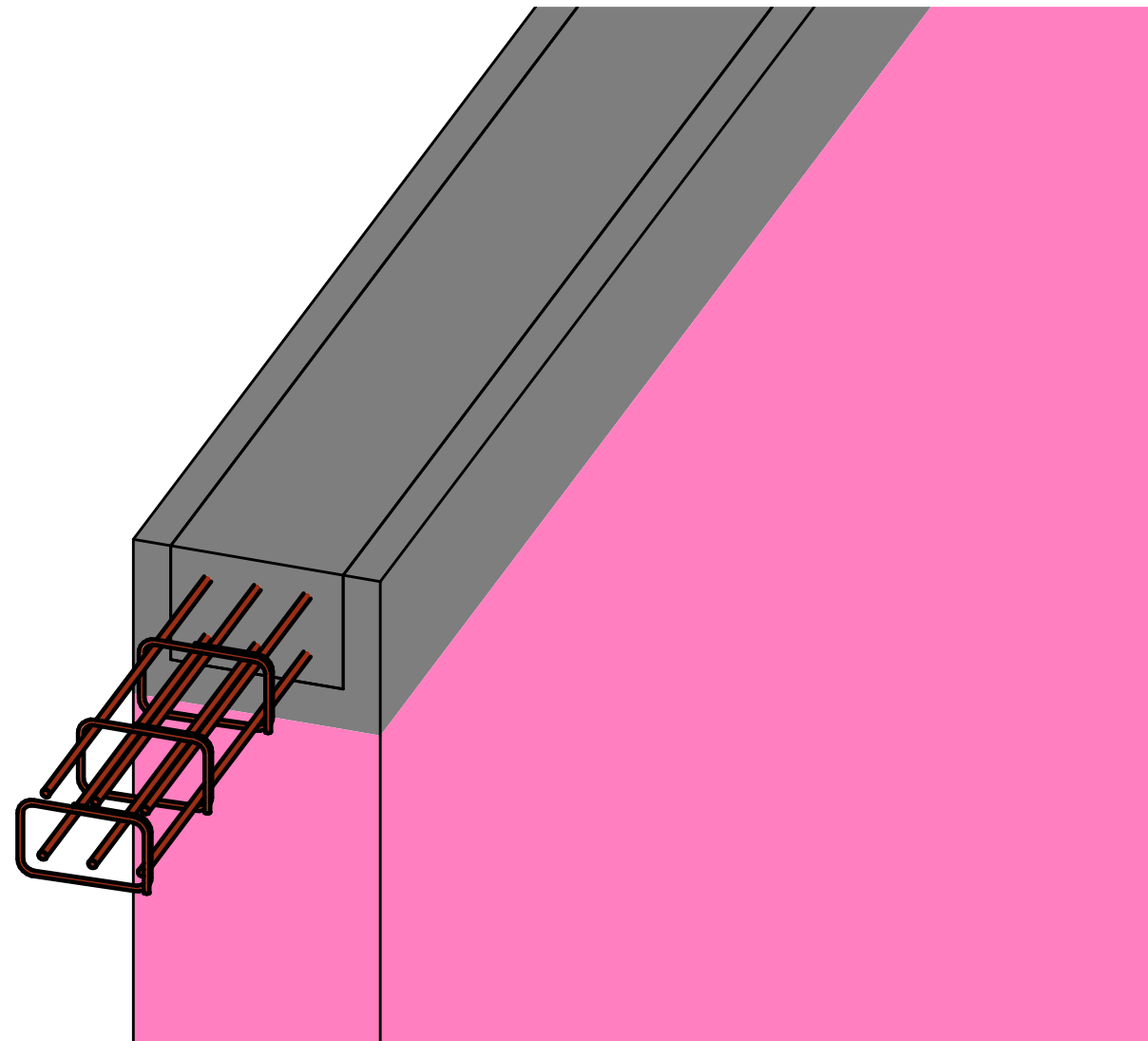
TITLE  
RING BEAM REINFORCEMENT - 365 SMARTWALL

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

SCALE (@ A3)	PROJECT REF. N/C
--------------	---------------------

DRAWING NUMBER 0000-ESJ-ZZ-00-DR-S - 503	REV 2
---	----------



**1** TYPICAL U-BLOCK RING BEAM - 365 SMARTWALL

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
 NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

THIS DETAIL APPLIES TO SMARTWALL WITH U-BLOCK WITH THICKNESS OF SMARTWALL 365 AND GREATER.

Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED SMARTWALL™**



EVOLVED SUPPLIES LTD  
 4 Firs Close, St Martins, SY11 3LT.  
 Tel: +44 (0)1691 707 100  
 info@evolvedsupplies.co.uk  
 www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
 SMARTWALL - TYPICAL DETAILS

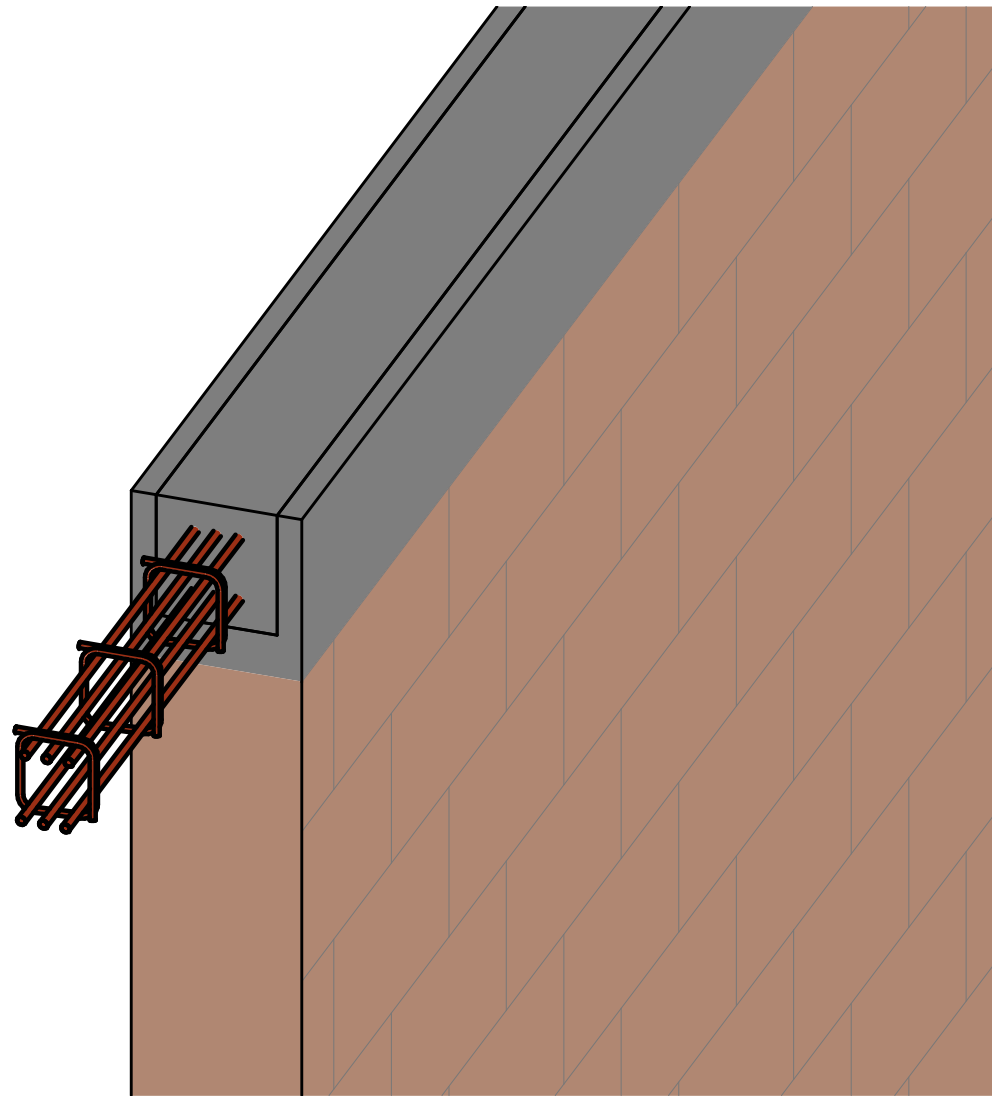
TITLE  
 RING BEAM ON TOP OF WALL - 365 SMARTWALL

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

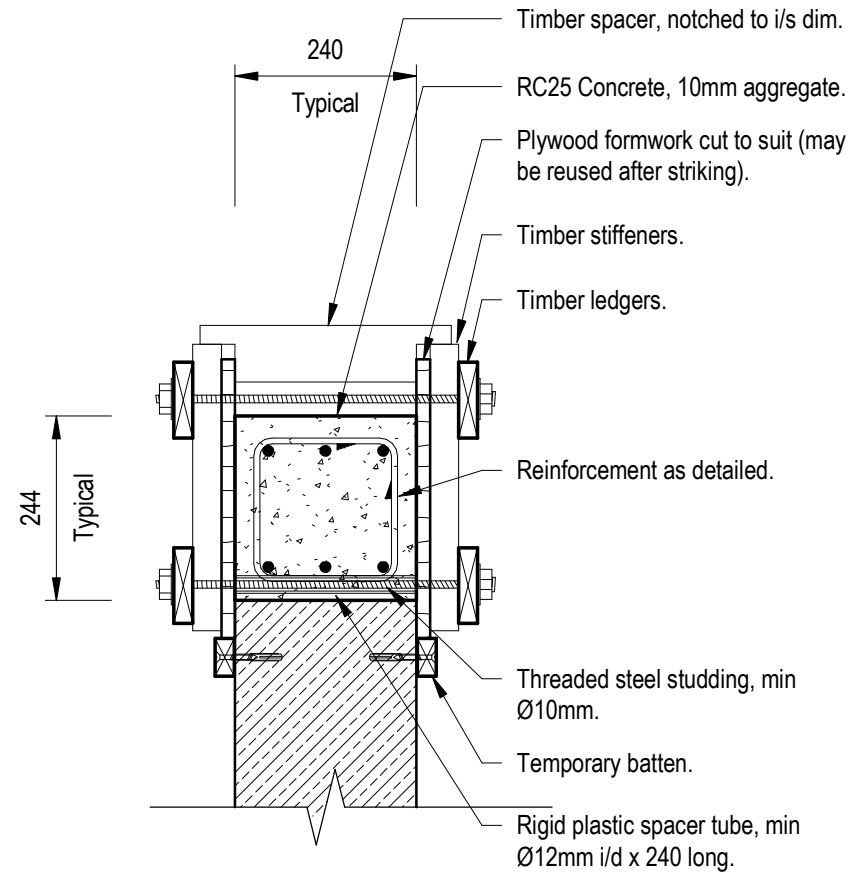
SCALE (@ A3)	PROJECT REF. N/C
--------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 504</b>	REV <b>2</b>
--	-----------------



**TYPICAL U-BLOCK RING BEAM - 240 SMARTWALL**

1



**FORMED RING BEAM - TYPICAL CROSS SECTION**

1 : 10

2

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

THIS DETAIL APPLIES TO SMARTWALL WITH U-BLOCK WITH THICKNESS OF SMARTWALL 240 AND LESS.

NOTE THAT, DEPENDING ON PROJECT REQUIREMENTS, THE U-BLOCK MAY BE OF INSUFFICIENT WIDTH TO ACCOMODATE THE REINFORCEMENT, IN WHICH CASE, THE FORMED RING BEAM, DETAIL 2, MUST BE USED. WITH APPROPRIATE PLANNING AND CARPENTRY, MOST PARTS OF THE FORMS CAN BE REUSED. WHERE STOP ENDS ARE REQUIRED BETWEEN POURS, THESE MAY BE FORMED AGAINST AN EML (E.G. HYRIB) SHEET FITTED INSIDE THE FORM AND HELD IN PLACE TO FORM A VERTICAL SURFACE.

Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
SMARTWALL - TYPICAL DETAILS

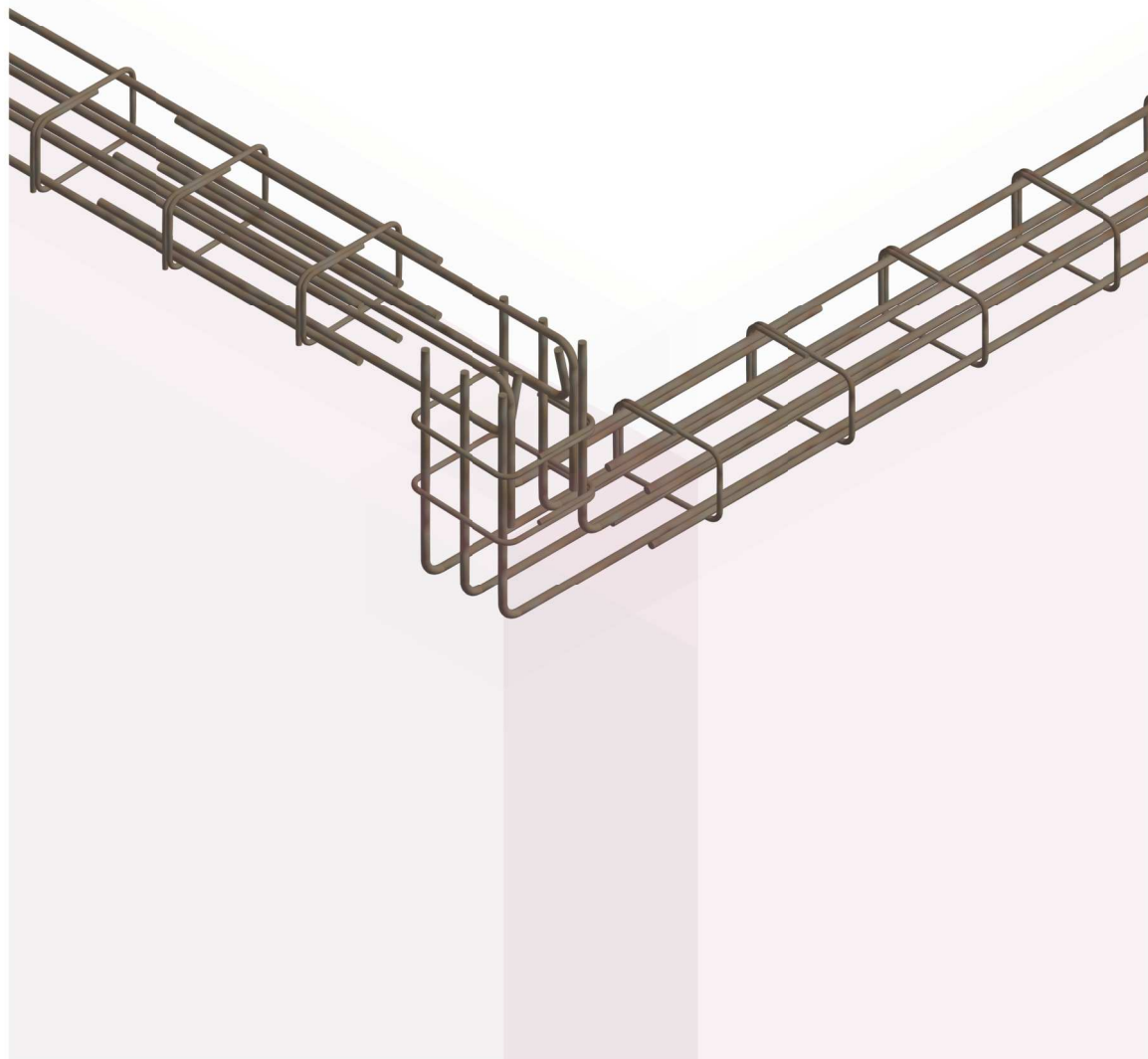
TITLE  
U-BLOCK RING BEAM - 240 SMARTWALL

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

DRAWING NUMBER 0000-ESJ-ZZ-00-DR-S - 505	REV 2
---	----------



**1 TYPICAL RING BEAM STEP - 365 SMARTWALL**

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
 NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

THIS DETAIL APPLIES TO SMARTWALL WITH U-BLOCK WITH THICKNESS OF SMARTWALL 365 AND GREATER.

OTHER SMARTWALL THICKNESSES SIMILAR BUT AS DETAILED ELSEWHERE.

Rev	Description	Date
1	Initial release.	14/7/2020
2	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED SMARTWALL™**



EVOLVED SUPPLIES LTD  
 4 Firs Close, St Martins, SY11 3LT.  
 Tel: +44 (0)1691 707 100  
 info@evolvedsupplies.co.uk  
 www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

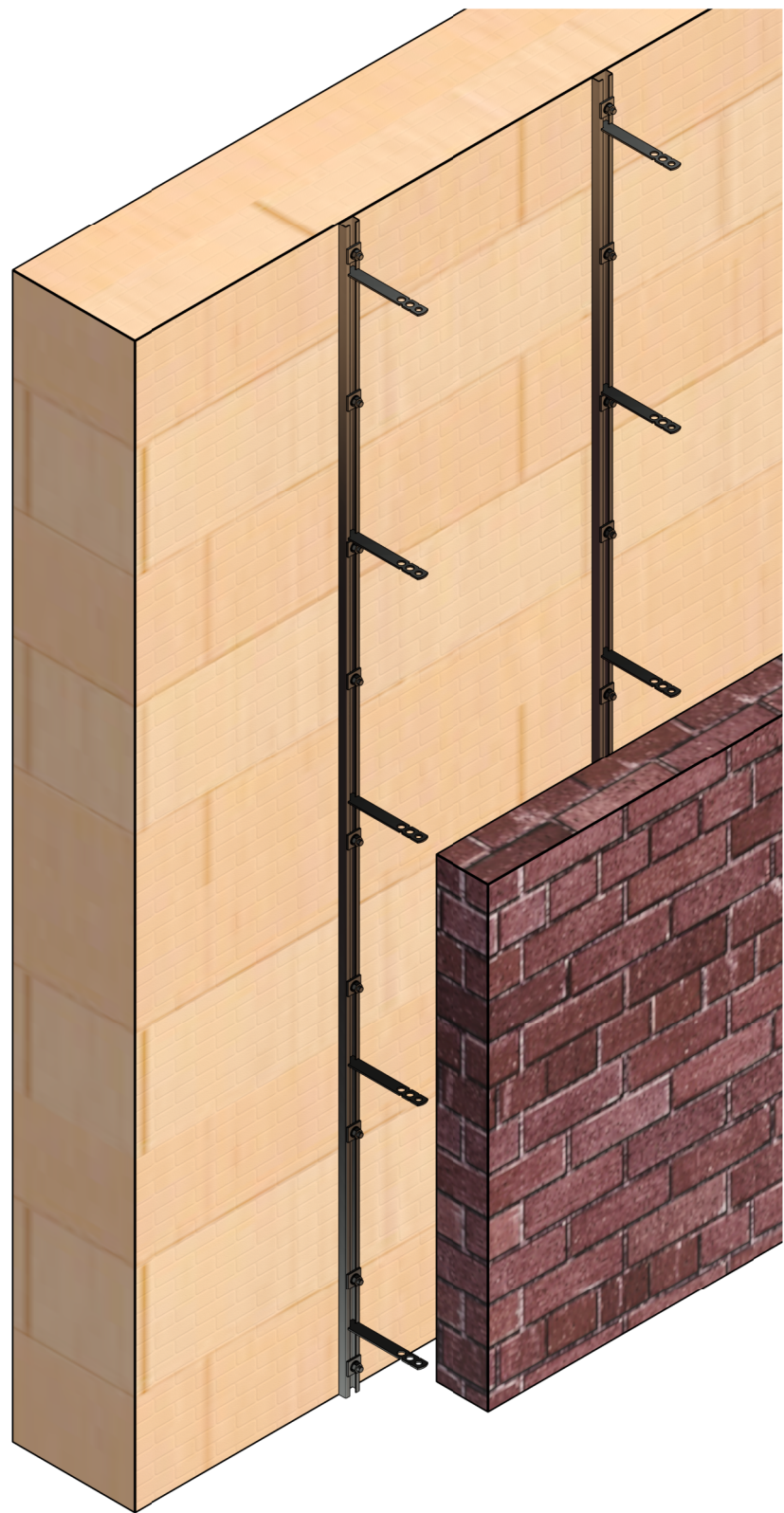
TITLE  
**RING BEAM STEP - 365 SMARTWALL**

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 15/7/2020
-----------------	------------	-------------------

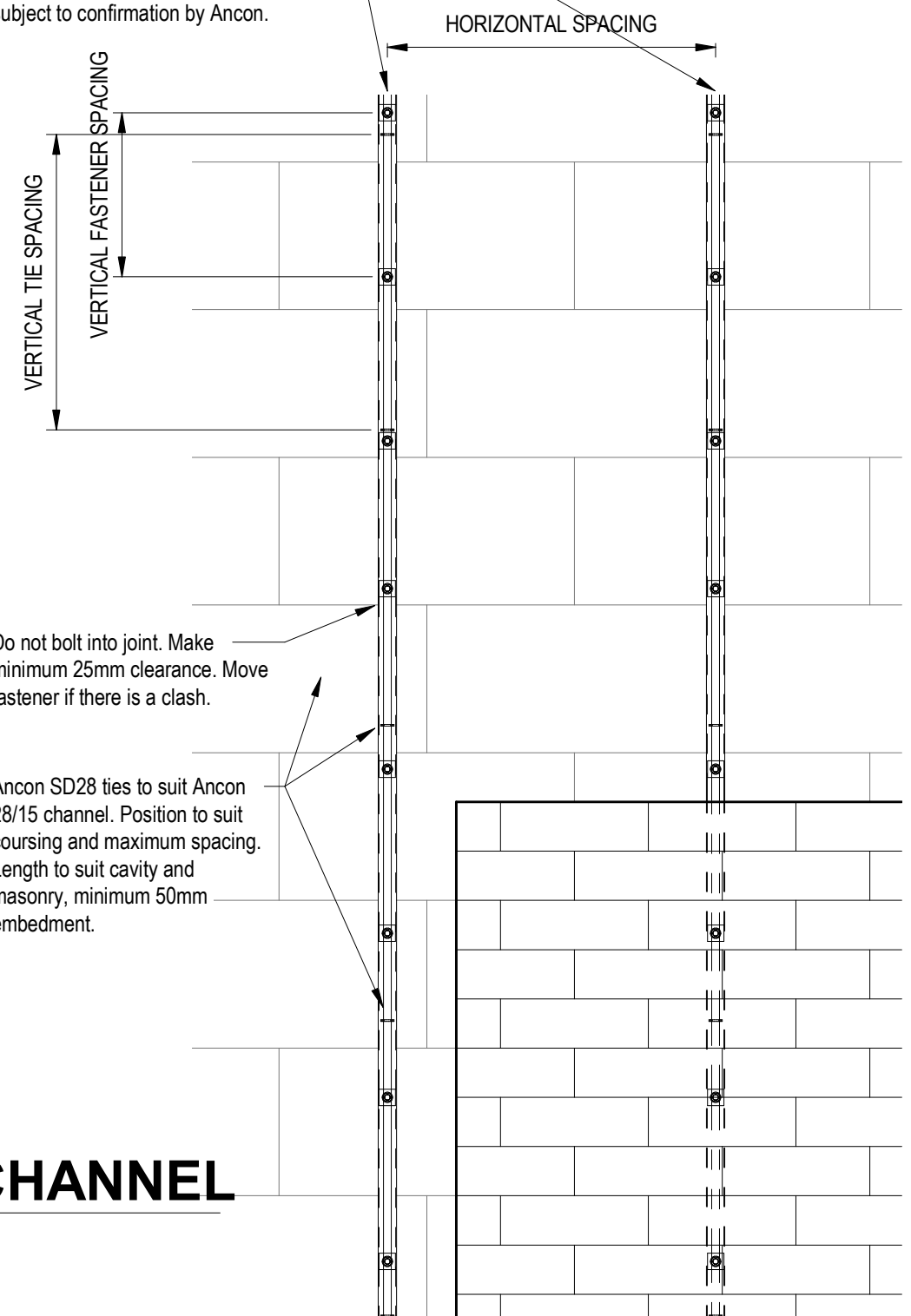
SCALE (@ A3)	PROJECT REF. N/C
--------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 506</b>	REV <b>2</b>
--	-----------------



Ancon stainless steel 28/15 channels fixed with Mungo MIT-Sr M8-110/80 resin anchors with 12 x 80 MIT-SH-K2 mesh sieve and MIT-SP polyester mortar. Ancon equivalent may be used, subject to confirmation by Ancon.

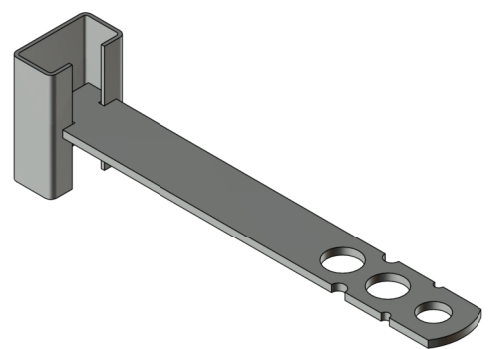
Mungo MIT-Sr M8-100/80 in MIT-SP mortar characteristic resistance:  
 $N_{Rk} = 1.2kN$ ,  $V_{Rk} = 2.5kN$



Do not bolt into joint. Make minimum 25mm clearance. Move fastener if there is a clash.

Ancon SD28 ties to suit Ancon 28/15 channel. Position to suit coursing and maximum spacing. Length to suit cavity and masonry, minimum 50mm embedment.

# 1 FACING RESTRAINT SYSTEM - CHANNEL



# 3 CHANNEL ARRANGEMENT

# 2 WALL ELEVATION - CHANNEL SYSTEM

1 : 10

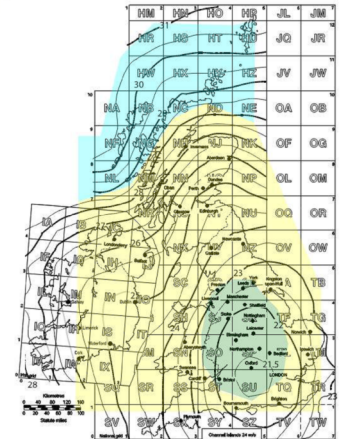
NOTE: THESE DETAILS ARE FOR HORIZONTAL RESTRAINT TO OUTER LEAF OF MASONRY ONLY. VERTICAL LOADS ARE TO BE SUPPORTED SEPARATELY - REFER TO PROJECT STRUCTURAL ENGINEER.

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION. NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Tie spacing permitted in geogrphic UK zones:				
	0.25	0.50	0.75	1.00
0.150	1, 2 & 3	1, 2 & 3	1 & 2	1
0.225	1, 2 & 3	1 & 2	1	NO
0.250	1, 2 & 3	1	NO	NO
0.300	1, 2 & 3	1	NO	NO
0.375	1 & 2	1	NO	NO
0.500	1 & 2	1	NO	NO

Anchor spacing permitted in geogrphic UK zones:				
	0.25	0.50	0.75	1.00
0.125	1, 2 & 3	1, 2 & 3	1, 2 & 3	1, 2 & 3
0.250	1, 2 & 3	1, 2 & 3	1 & 2	1 & 2
0.500	1, 2 & 3	1	NO	NO

Zone 1  
Zone 2  
Zone 3



In the above tables: The first column contains the vertical spacing. The top row contains the horizontal spacing. All units are metres.

Rev	Description	Date
1	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------

**EVOLVED SMARTWALL™**

EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

TITLE  
**OUTER LEAF RESTRAINT - CHANNEL SYSTEM**

CLIENT

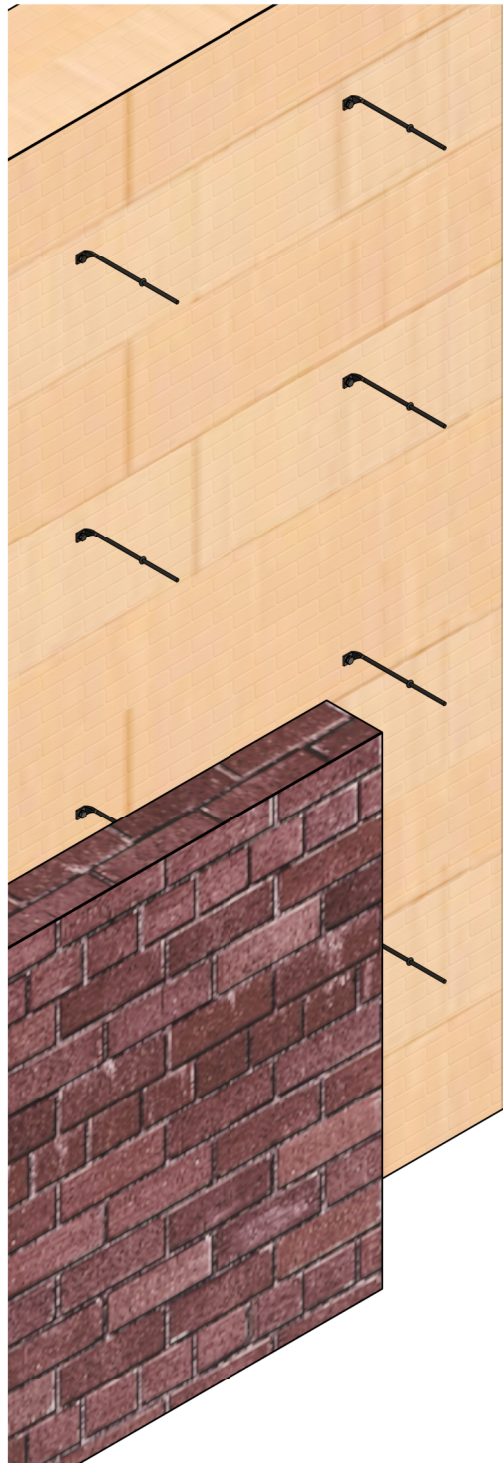
DRAWN BY RAB	CHECKED BY Checker	DATE 05/11/21
-----------------	-----------------------	------------------

SCALE (@ A3) 1 : 10	PROJECT REF. N/C
------------------------	---------------------

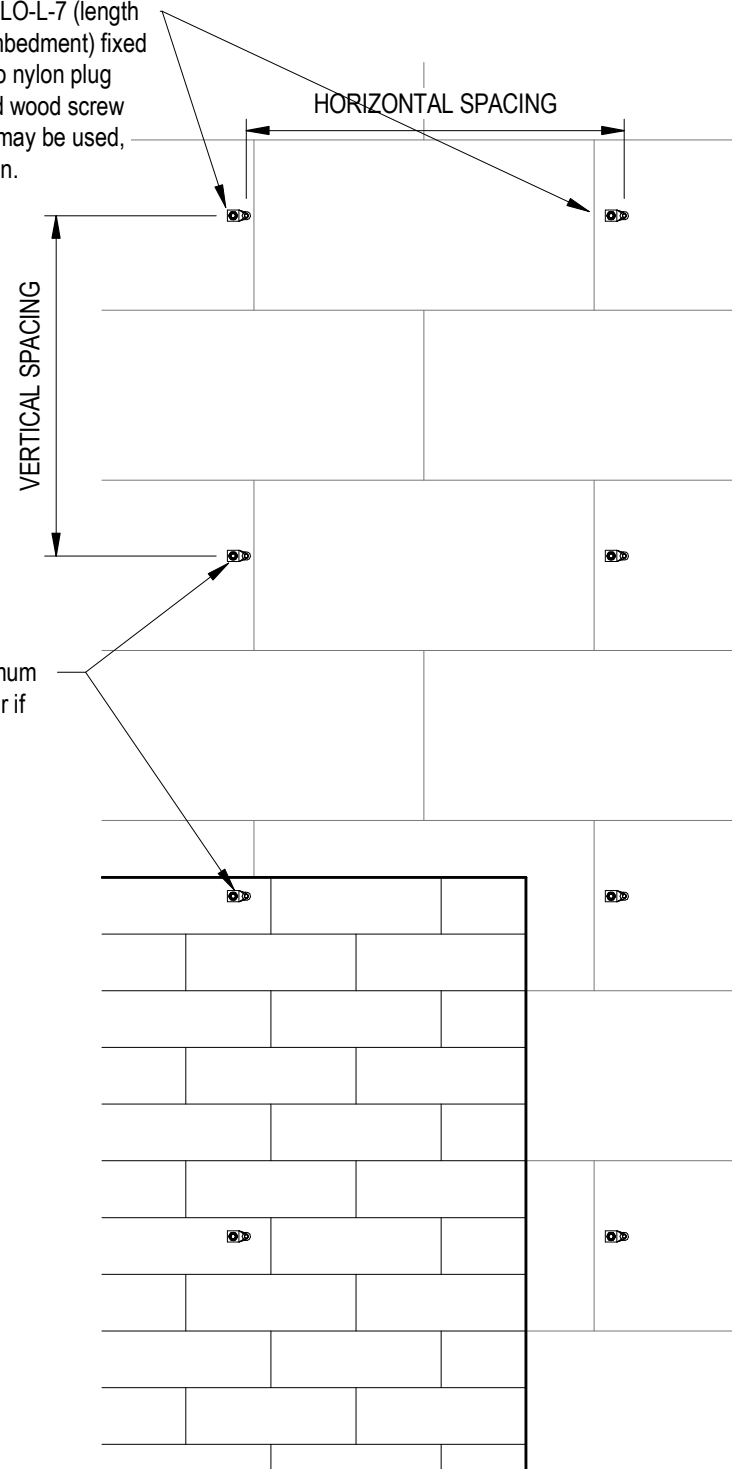
DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 601</b>	REV <b>1</b>
--	-----------------



Ancon Teplo wall ties type TEPL0-L-7 (length to suit cavity and 50mm min embedment) fixed with Mungo MQ - 10x50 Quatro nylon plug and Ø6 x 60 stainless hex-head wood screw and washer. Ancon equivalent may be used, subject to confirmation by Ancon.



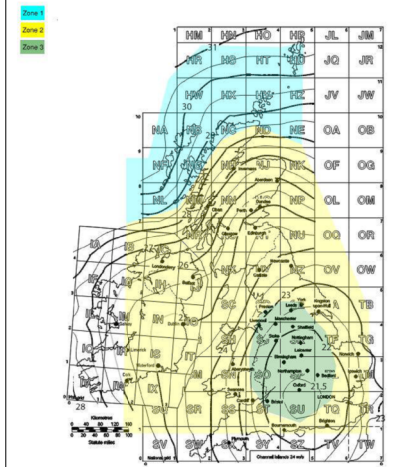
Do not fix into joint. Make minimum 25mm clearance. Move fastener if there is a clash.



Mungo Quatro MQ 10x50 nylon plug with Ø6 x 60 stainless steel screw, recommended resistance:  
 $N_{Rec} = 0.5kN$  (Note: working load spec. includes resistance factor as per DoP).

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
 NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Tie spacing permitted in georgraphic UK zones:				
	0.25	0.50	0.75	1.00
0.250	1, 2 & 3	1, 2 & 3	1, 2 & 3	1, 2 & 3
0.500	1, 2 & 3	1, 2 & 3	1	1
0.750	1, 2 & 3	1	NO	NO
1.000	1, 2 & 3	1	NO	NO



In the above tables: The first column contains the vertical spacing. The top row contains the horizontal spacing. All units are metres.

Rev	Description	Date
1	General updates and new data.	12/5/21

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED SMARTWALL™**



EVOLVED SUPPLIES LTD  
 4 Firs Close, St Martins, SY11 3LT.  
 Tel: +44 (0)1691 707 100  
 info@evolvedsupplies.co.uk  
 www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
 SMARTWALL - TYPICAL DETAILS

TITLE  
 OUTER LEAF RESTRAINT - TEPL0 SYSTEM

CLIENT

DRAWN BY RAB	CHECKED BY	DATE 05/11/21
-----------------	------------	------------------

SCALE (@ A3) As indicated	PROJECT REF. N/C
------------------------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 602</b>	REV <b>1</b>
--	-----------------

# 1 FACING CONTINUITY SYSTEM - TEPL0

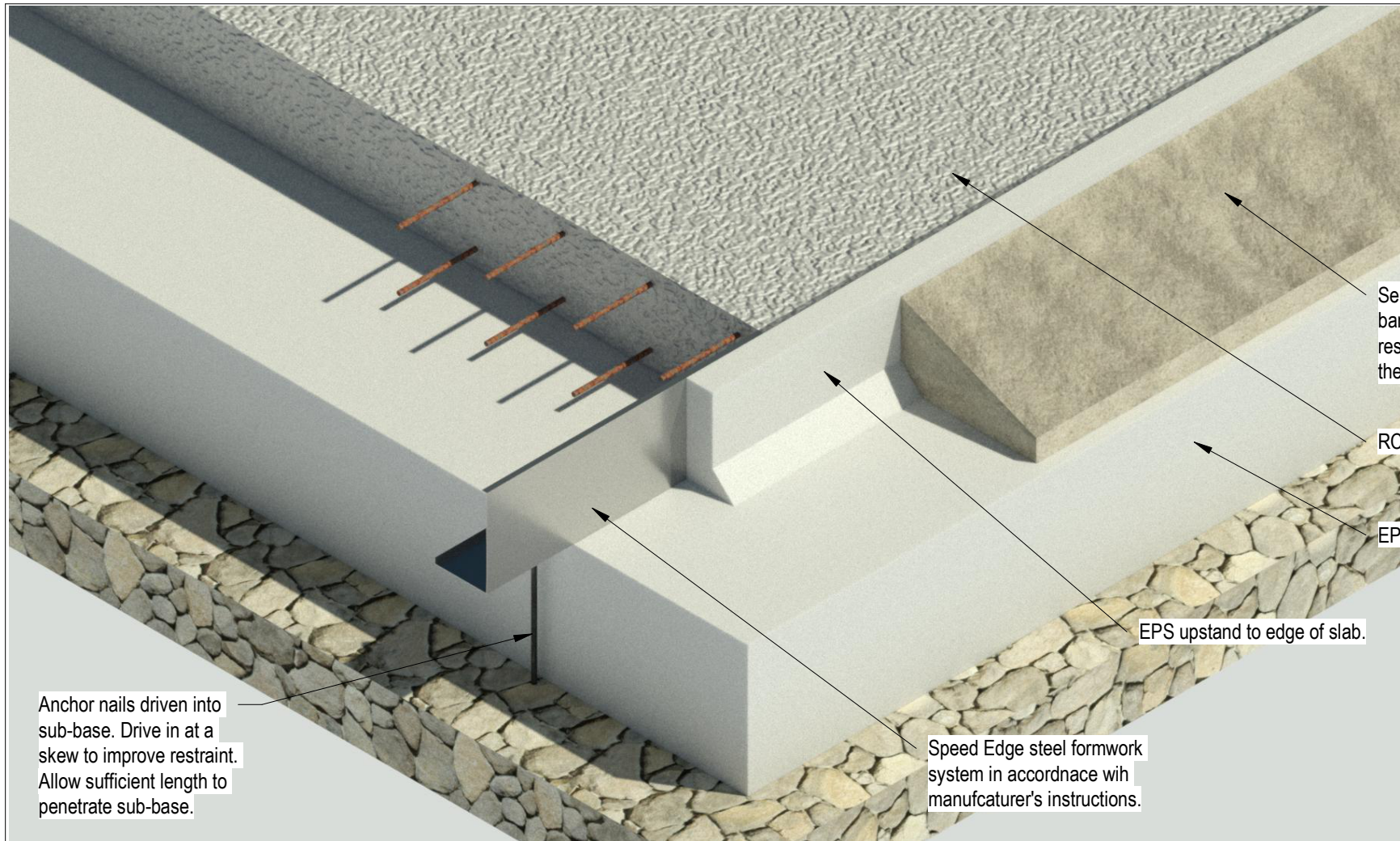
# 2 WALL ELEVATION - TEPL0 TIES

1 : 10

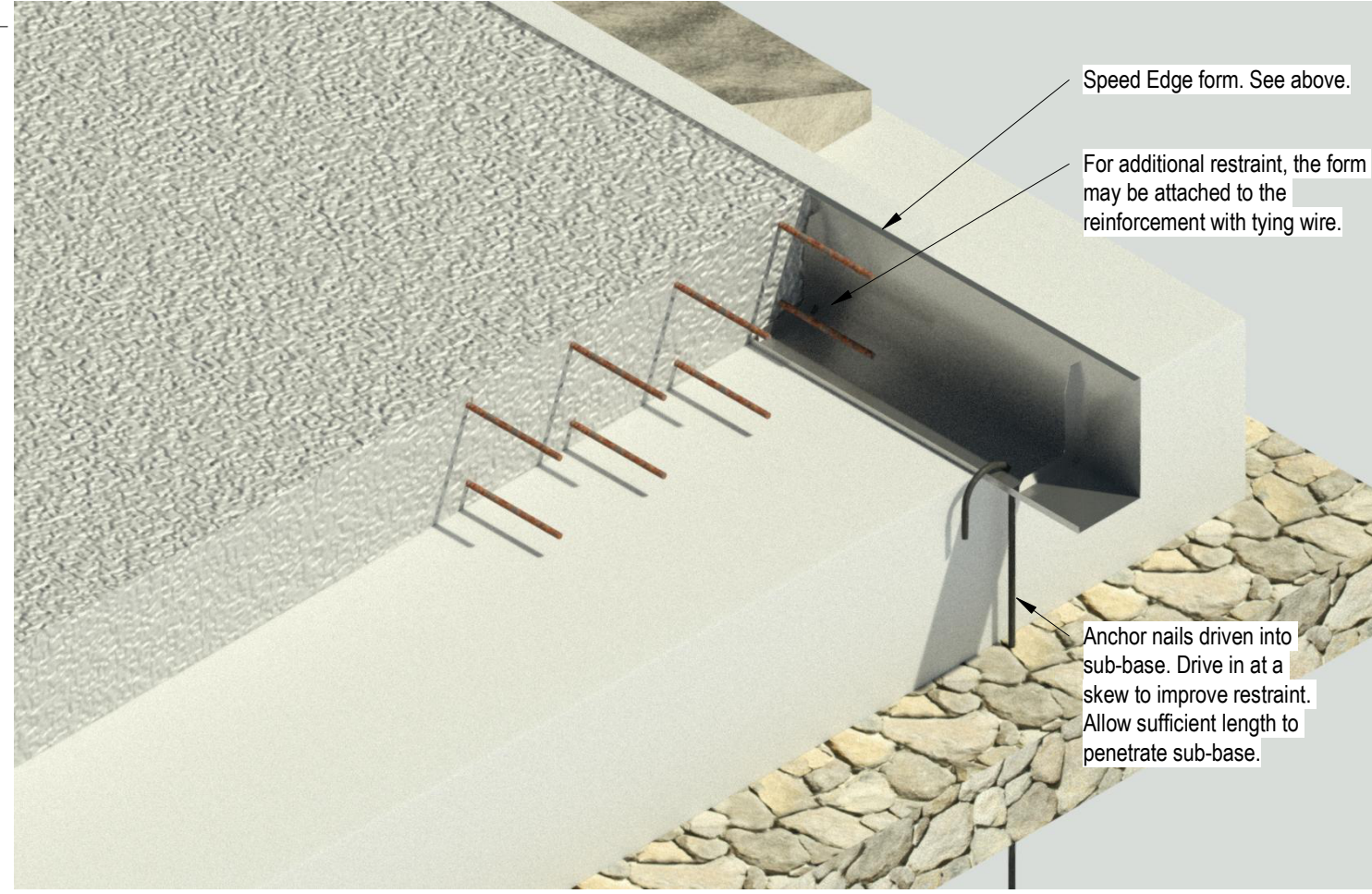


# 3 TEPL0 ARRANGEMENT

1 : 1



**1** **SLAB ARRANGEMENT 1**  
1 : 1



**2** **SLAB ARRANGEMENT 2**  
1 : 1

ALL WORKS SUBJECT TO BCO AND BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION.  
NO WORK SHALL BE UNDERTAKEN ACCORDING TO THIS DRAWING OR OTHERS IN A SET WITH OR CROSS REFERENCED BY IT UNTIL BUILDING REGULATIONS APPROVAL OR SER CERTIFICATION HAS BEEN GRANTED.

Rev	Description	Date

SUITABILITY S0	LOD N/C	MODEL VERSION CODE P00
-------------------	------------	---------------------------



**EVOLVED SMARTWALL™**



EVOLVED SUPPLIES LTD  
4 Firs Close, St Martins, SY11 3LT.  
Tel: +44 (0)1691 707 100  
info@evolvedsupplies.co.uk  
www.evolvedsupplies.co.uk

Copyright in this drawing and work executed is and remains the property of Evolved Supplies Ltd. and or its subsidiaries in accordance with the provisions of the Copyright Act. Permission to produce copies or modified drawings in whole or in part for any purpose must be obtained from Evolved Supplies Ltd. and any such reproductions must include this and all other notes.

PROJECT  
**SMARTWALL - TYPICAL DETAILS**

TITLE  
**SLAB EDGE FORMING**

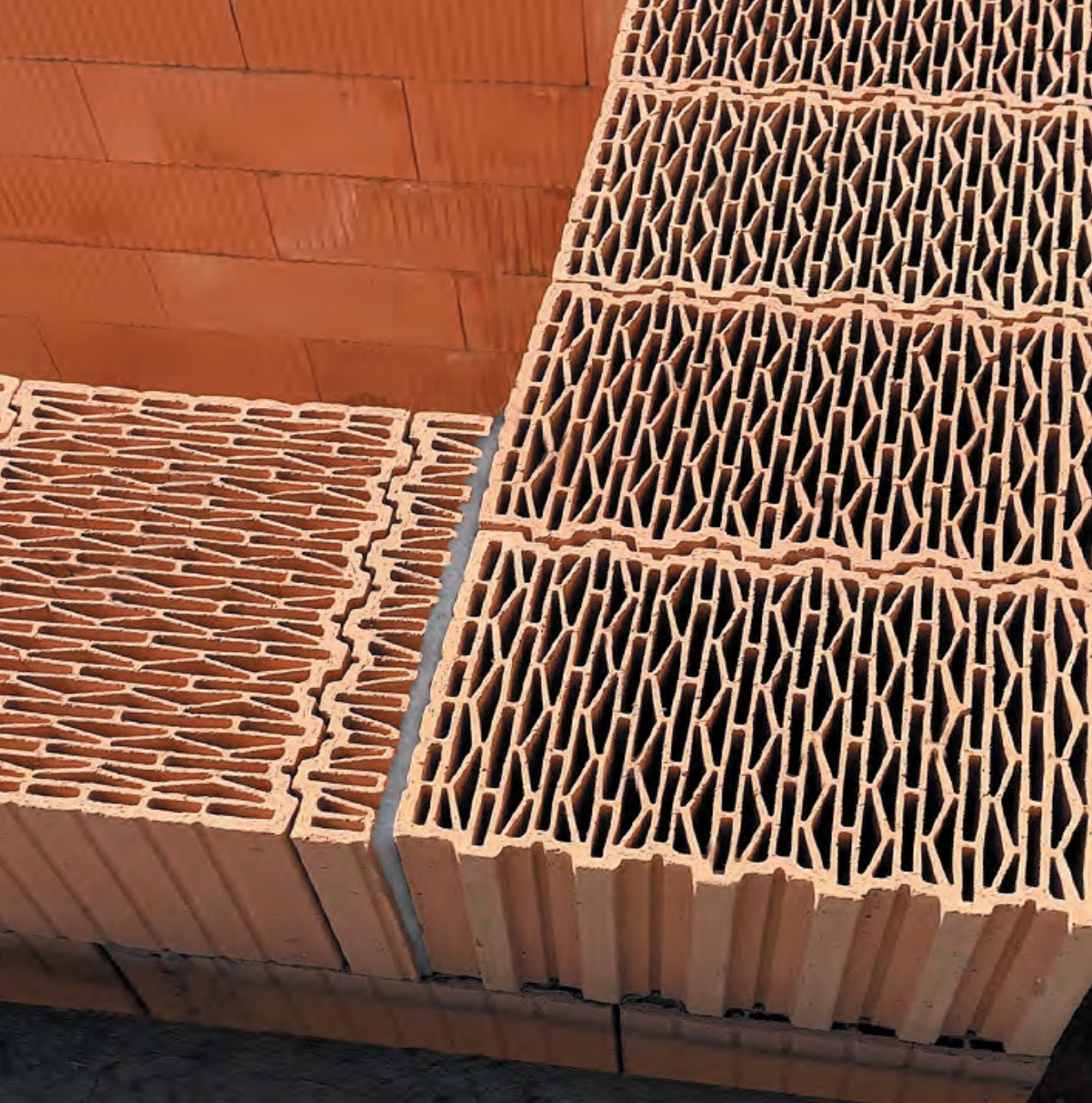
CLIENT

DRAWN BY RAB	CHECKED BY	DATE 05/26/21
-----------------	------------	------------------

SCALE (@ A3) 1 : 1	PROJECT REF. N/C
-----------------------	---------------------

DRAWING NUMBER <b>0000-ESJ-ZZ-00-DR-S - 603</b>	REV
--	-----





**EVOLVED  
SMARTWALL™**

JUWO Evolved SmartWall™

T: 0808 2540 500

E: [mail@juwo-smartwall.co.uk](mailto:mail@juwo-smartwall.co.uk)

[www.juwo-smartwall.co.uk](http://www.juwo-smartwall.co.uk)