

# NIHE STANDARD DETAILS

March 2017 - Amendment 1 (April 2017)

Director of Landlord Services The Housing Executive 2 Adelaide Street Belfast BT2 8PB

# ACKNOWLEDGEMENTS

Grateful acknowledgement is made to the Building Project Information Committee for the use of the Co-ordinated Project Information (CPI) Logo.

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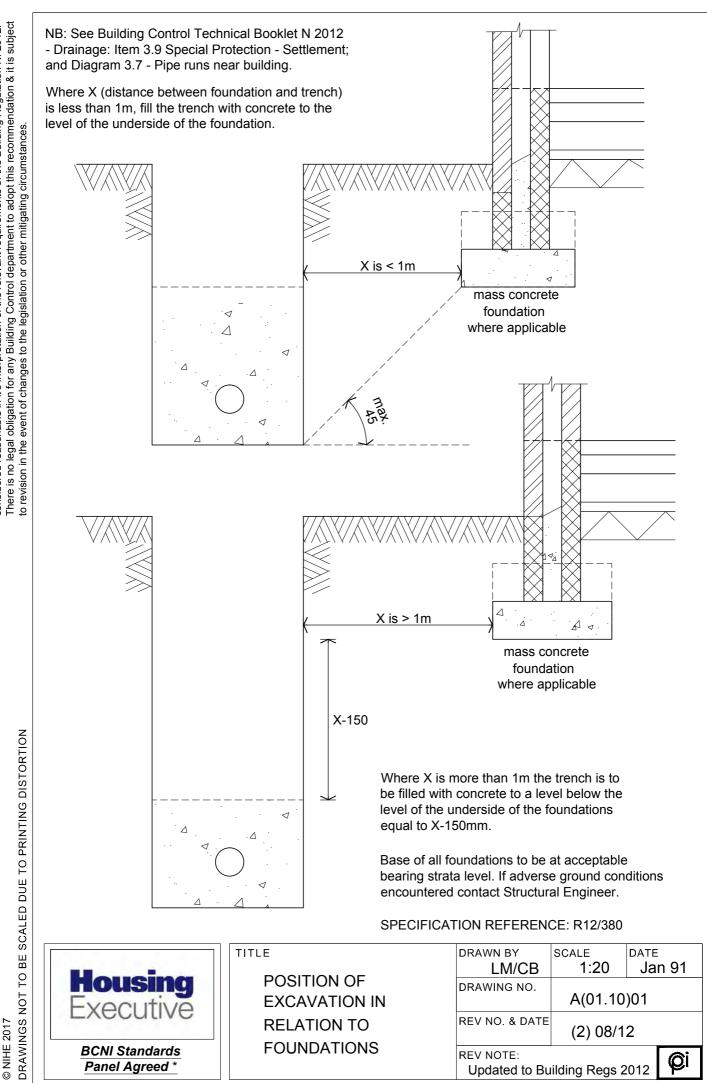
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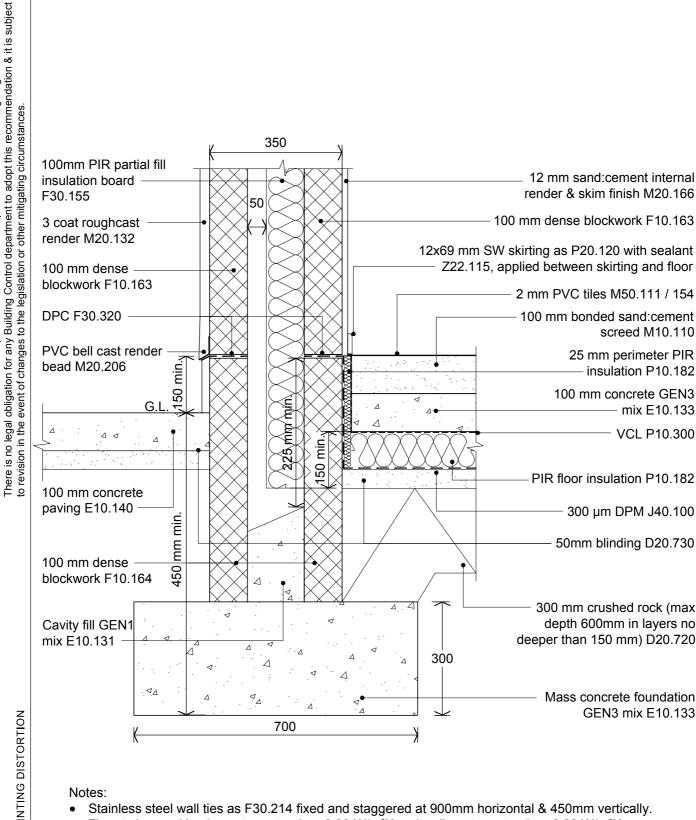
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2	Walls & First Floors		Thresholds, Reveals, Cills & Heads	First Floors		Anchor Straps		
3	Chimneys & Flues			Flues & Stacks				
4	Roof Structure	Ridge Details	Flashings	Eaves Details				
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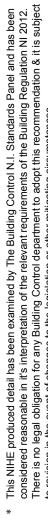


- Floor to have a U-value not greater than 0.22 W/m²K and walls not greater than 0.28 W/m²K.
- Where a facing brick outer leaf is preferred apply clause F10.151 (general brickwork clause to be completed by the Designer).
- Width and depth of foundations to be determined on site to suit ground conditions and to Building Control approval.

TO BE S(	Housing	TITLE	drawn by P&S	scale 1:10	DATE Jar	า 91
NOT T	Executive	SOLID INSULATED	DRAWING NO.	A(01.11	)01	
	LACCULIVE	GROUND FLOOR	REV NO. & DATE	(9) 10/1	4	
DRAWINGS	BCNI Standards Panel Agreed *	Insulation below ground bearing slab	REV NOTE: Updated for E	Building Con	itrol	Øi

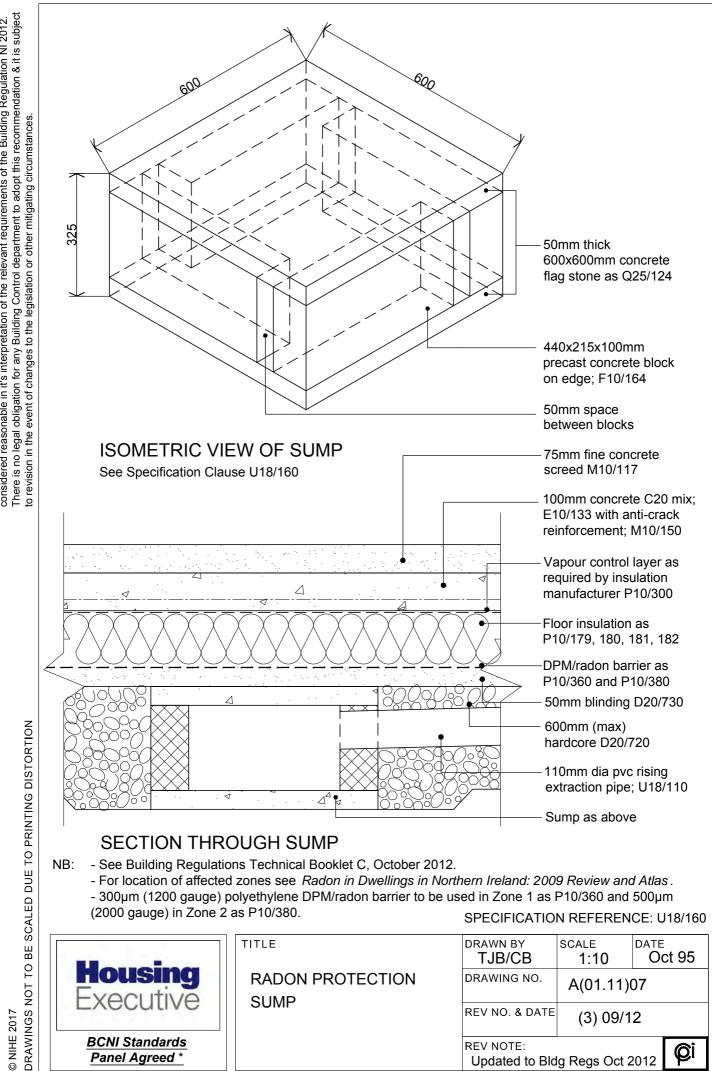
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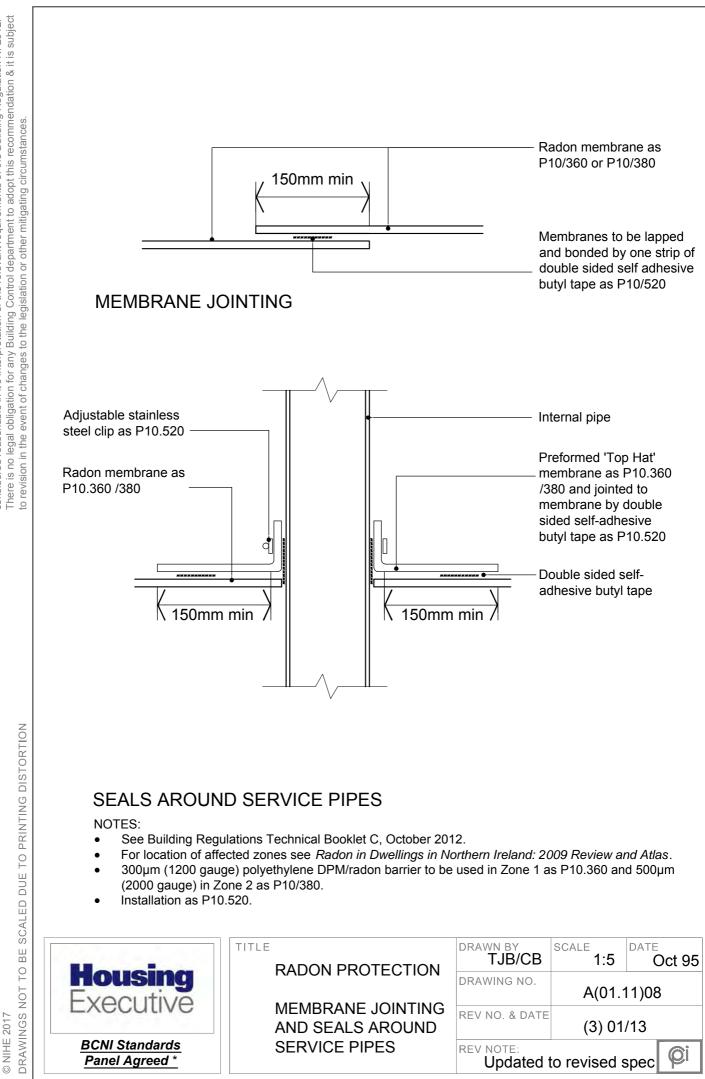


		$\left \right\rangle$		
	5			
				100mm PIR partial fill insulation board F30.155
				100 mm dense blockwork
				F10.163
ating circ				100 mm facing brick F10.151
DPC to outer leaf stepped				• 12 mm sand:cement internal render & skim finish M20.166
تو كلي to maintain min. 150mm م و كامي above ramp level				DPC wrapped up inner face of inner leaf to
				min. 150mm tanking above floor level F30.320 12x69 mm SW skirting as P20.120 with sealant
				Z22.115, applied between skirting and floor 2 mm PVC tiles M50.111 / 154
				100 mm bonded sand:cement screed M10.110
to revision in the event of changes to the legislation of the militaring circumstances.				25 mm perimeter PIR insulation P10.182
				100 mm concrete GEN3
				VCL P10.300
			120	PIR floor insulation P10.182
				300 µm DPM J40.100
		. Δ		
		1 •7		100 mm dense blockwork F10.164
	X		<u> </u>	م م م م م م م م م م م م م م م م م م م
	· · · · · · · · · · · · · · · · · ·	<	• .•	deeper than 150 mm) D20.720
	4	⊿	  	4 300
	1 ⊲	⊿	⊿.	Mass concrete foundation GEN3 mix E10.133
		700		
<ul> <li>Floor to have a U-value</li> <li>Where a facing brick of completed by the Dest</li> </ul>	ue not gro outer lea signer). undation	eater tha f is prefe is to be o	an 0.22 erred ar determi	staggered at 900mm horizontal & 450mm vertically. W/m²K and walls not greater than 0.28 W/m²K. pply clause F10.151 (general brickwork clause to be ined on site to suit ground conditions and to Building
₩	TITLI	E		DRAWN BY SCALE DATE P&S 1:10 Nov 16
				ULATED DRAWING NO. A(01.11)02
				REV NO. & DATE
Housing Executive <u>BCNI Standards</u> Panel Agreed *			•	Ramp REV NOTE:

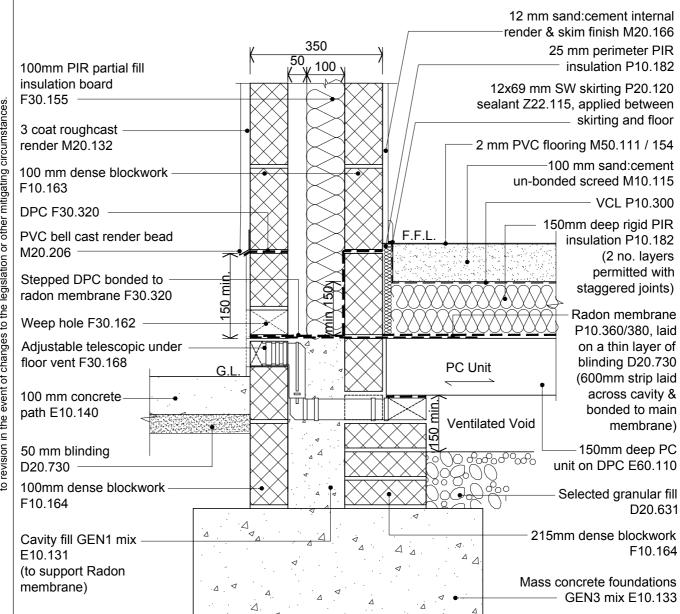


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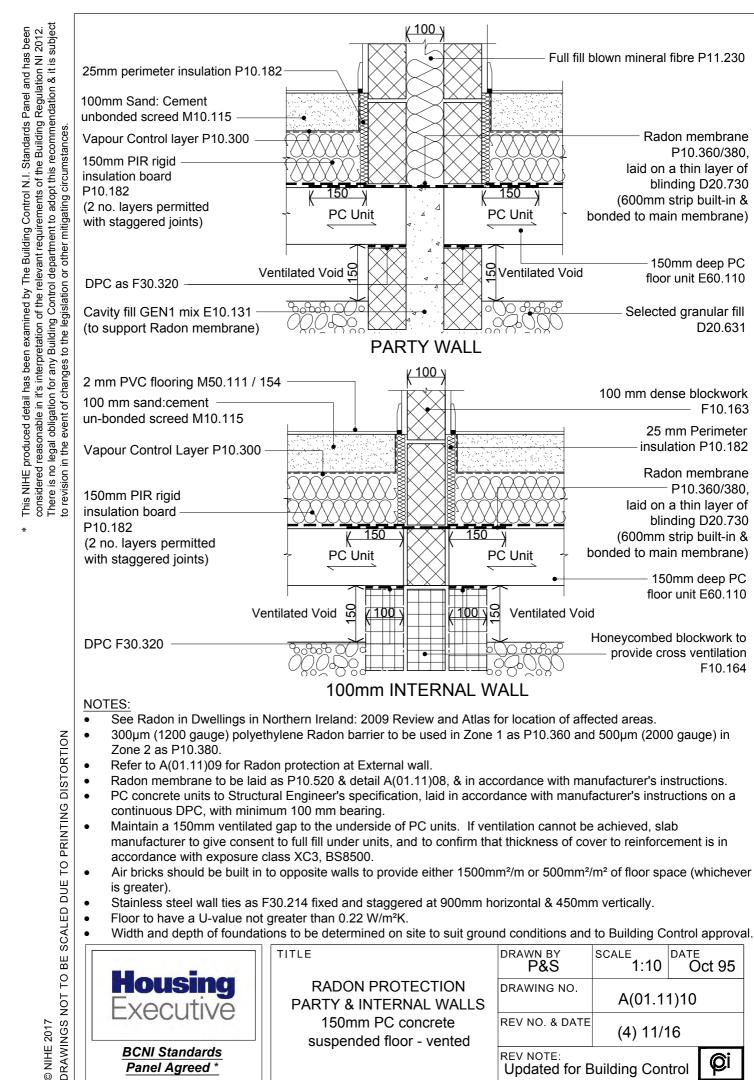
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# NOTES:

- See Radon in Dwellings in Northern Ireland: 2009 Review and Atlas for location of affected areas.
- 300µm (1200 gauge) polyethylene Radon barrier to be used in Zone 1 as P10.360 and 500µm (2000 gauge) in Zone 2 as P10.380.
- Refer to A(01.11)10 for Radon Protection at Internal & Party Wall Junctions.
- Radon membrane to be laid as P10.520 & detail A(01.11)08, & in accordance with manufacturer's instructions.
  PC concrete units to Structural Engineer's specification, laid in accordance with manufacturer's instructions on a
- PC concrete units to Structural Engineer's specification, laid in accordance with manufacturer's instructions on a continuous DPC, with minimum 100 mm bearing.
   Maintain a 150mm ventilated gap to the underside of PC units. If ventilation cannot be achieved, slab.
- Maintain a 150mm ventilated gap to the underside of PC units. If ventilation cannot be achieved, slab manufacturer to give consent to full fill under units, and to confirm that thickness of cover to reinforcement is in accordance with exposure class XC3, BS8500.
- Air bricks should be built into opposite walls to provide either 1500mm<sup>2</sup>/m or 500mm<sup>2</sup>/m<sup>2</sup> of floor space (whichever is greater).
- Stainless steel wall ties as F30.214 fixed and staggered at 900mm horizontal & 450mm vertically.
- Floor to have a U-value not greater than 0.22 W/m<sup>2</sup>K and walls not greater than 0.28 W/m<sup>2</sup>K.
- Width and depth of foundations to be determined on site to suit ground conditions and to Building Control approval.
- For a facing brick outer leaf apply clause F10.151 (general brickwork clause to be completed by the Designer).

	TITLE	drawn by <b>P&amp;S</b>	scale 1:10	Oct 95
Housing Executive	suspended floor - vented	DRAWING NO.	A(01.11)C	9
		REV NO. & DATE	(5) 11/16	
BCNI Standards Panel Agreed *		REV NOTE: Updated for E	trol <b>©i</b>	



150mm PC concrete

suspended floor - vented

nzontar & 450mm ventically.					
d conditions and to Building Control approval.					
drawn by <b>P&amp;S</b>	scale 1:10	date O	ct 95		
DRAWING NO.	A(01.11)10				
REV NO. & DATE	(4) 11/16				
REV NOTE: Updated for Building Control					

Full fill blown mineral fibre P11.230

Radon membrane

blinding D20.730

150mm deep PC

floor unit E60.110

D20.631

F10.163

25 mm Perimeter insulation P10.182

Radon membrane P10.360/380,

blinding D20.730

150mm deep PC floor unit E60.110

F10.164

laid on a thin layer of

(600mm strip built-in &

bonded to main membrane)

Honeycombed blockwork to

provide cross ventilation

Ventilated Void

Selected granular fill

100 mm dense blockwork

laid on a thin layer of

(600mm strip built-in &

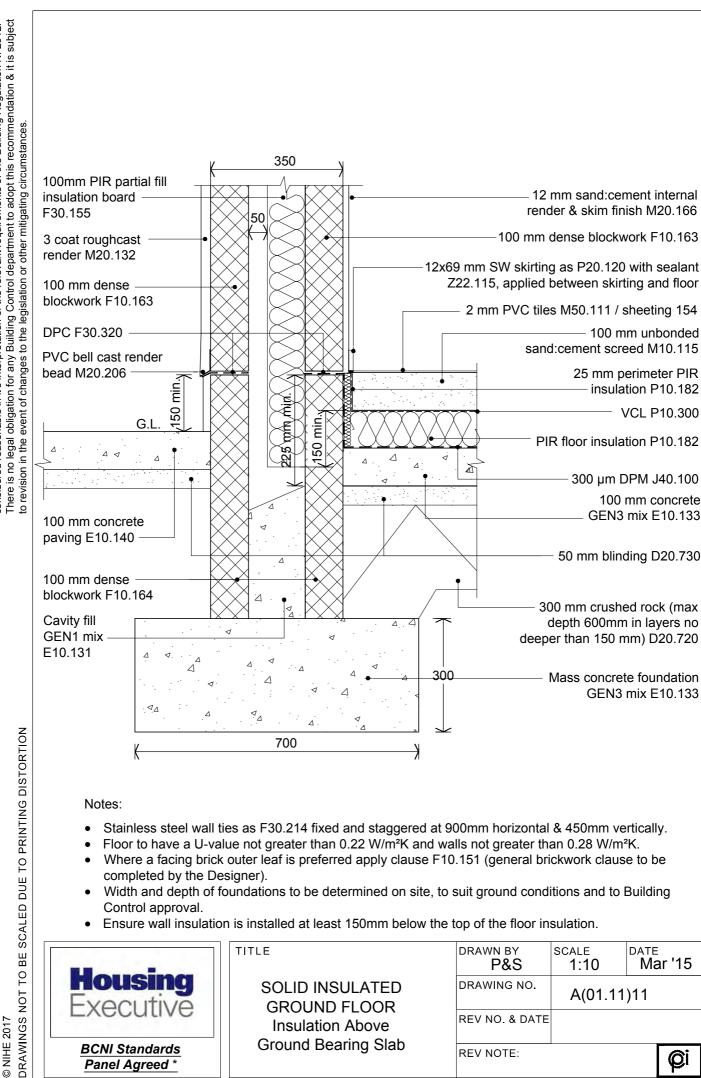
bonded to main membrane)

P10.360/380.

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**BCNI Standards** 

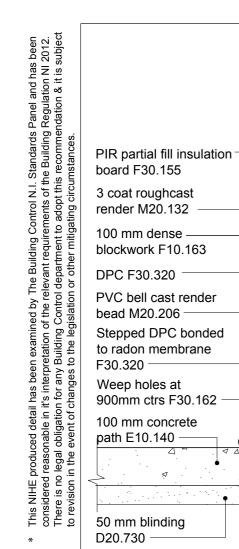
Panel Agreed

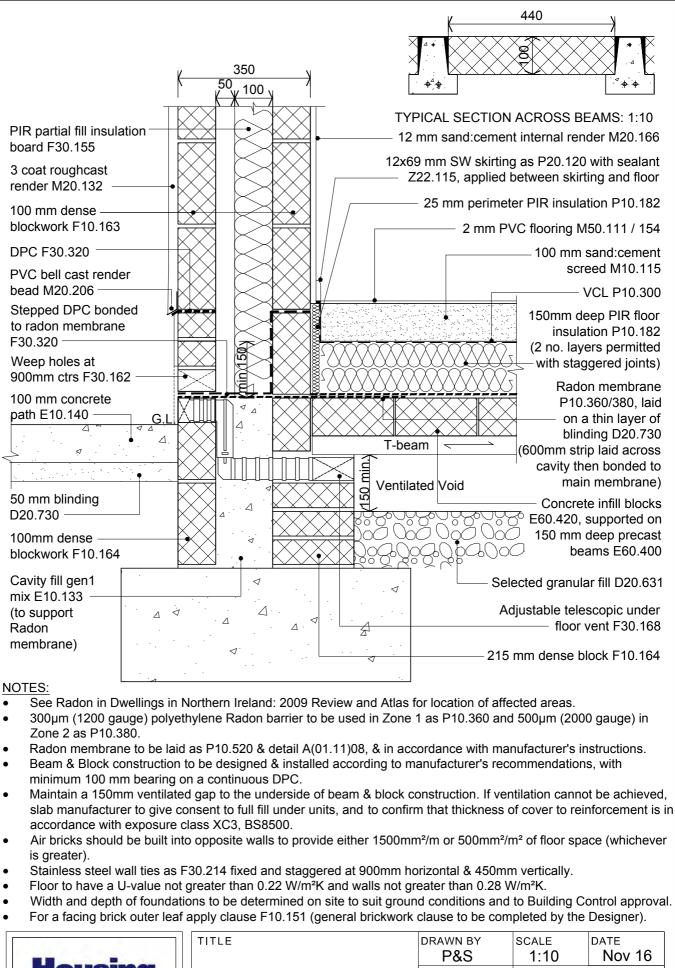


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	TITLE	DRAWN BY P&S	SCALE 1:10	DATE Mar '15
Housing Executive	SOLID INSULATED GROUND FLOOR	DRAWING NO.	A(01.11	)11
	Insulation Above	REV NO. & DATE		
BCNI Standards Panel Agreed *	Ground Bearing Slab	REV NOTE:		Øi

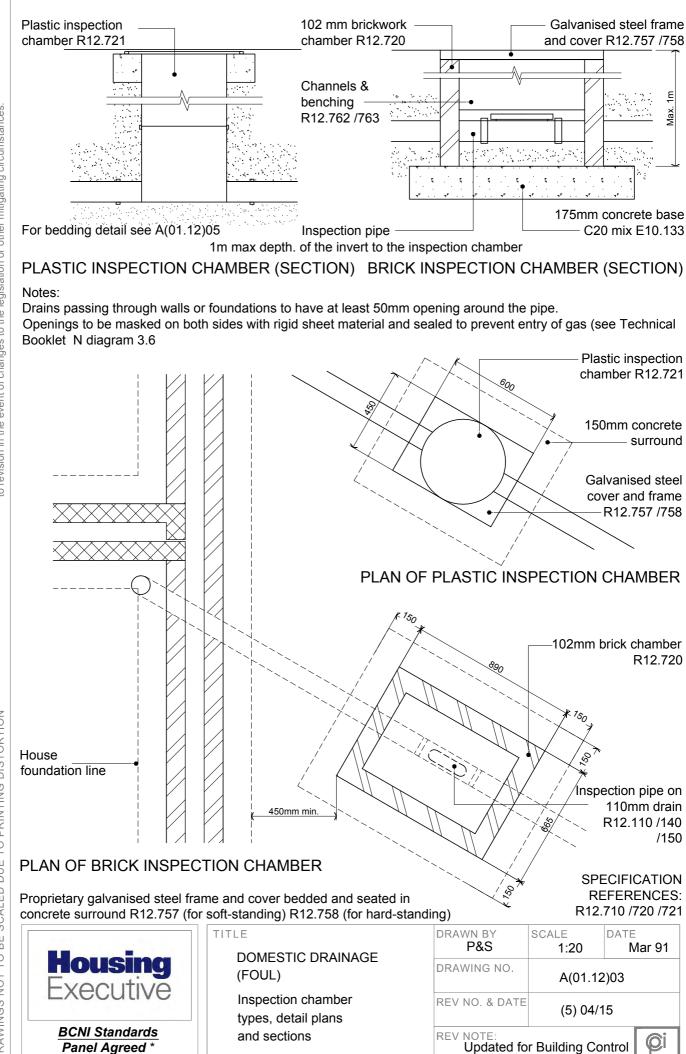




	TITLE	drawn by <b>P&amp;S</b>	scale 1:10	DATE Nov 16
Housing Executive	RADON PROTECTION EXTERNAL WALL	DRAWING NO.	A(01.11	)13
	beam & block suspended	REV NO. & DATE		
BCNI Standards Panel Agreed *	floor - vented	REV NOTE:		Øi

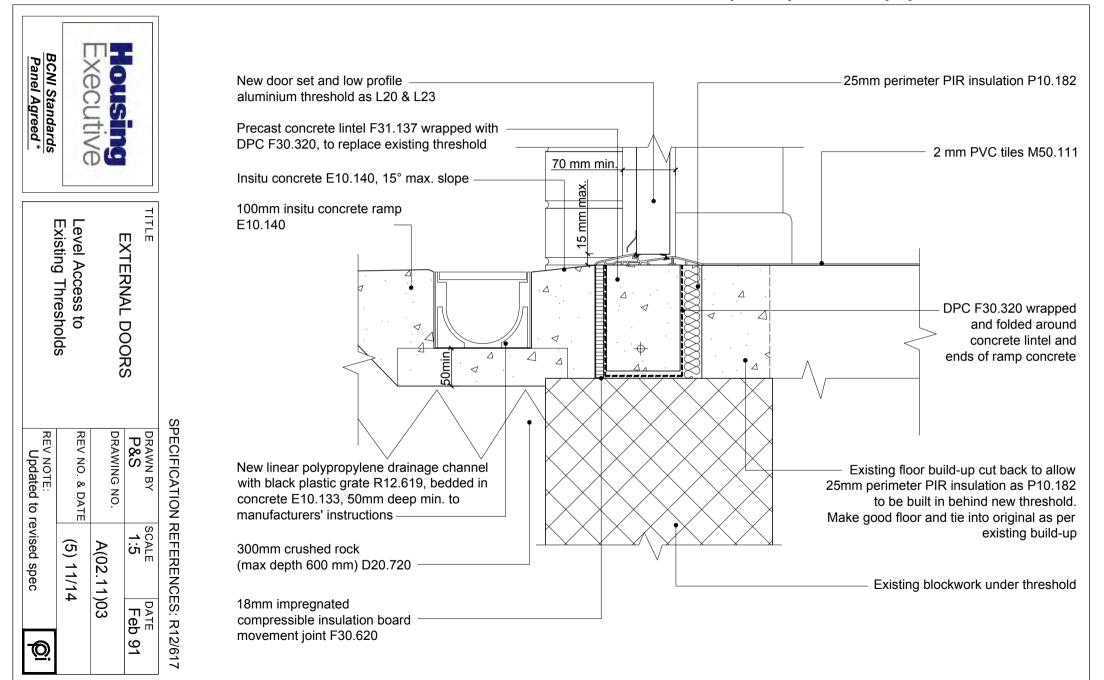
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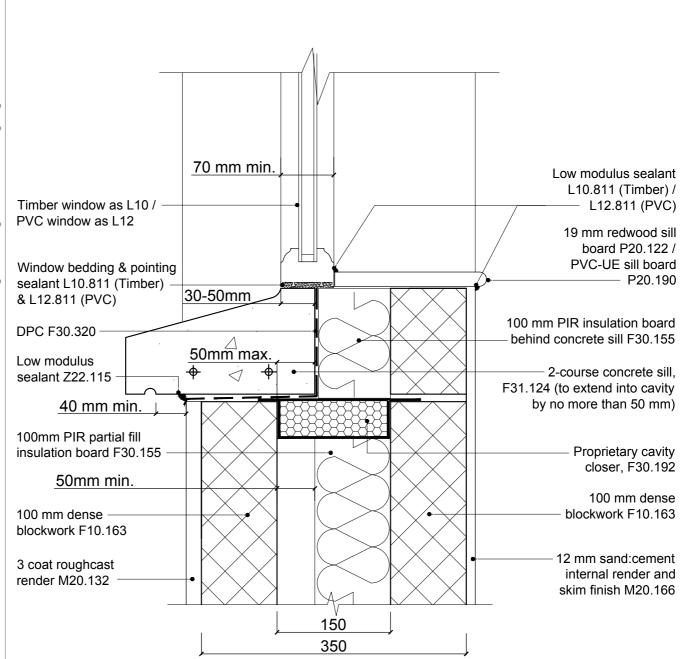
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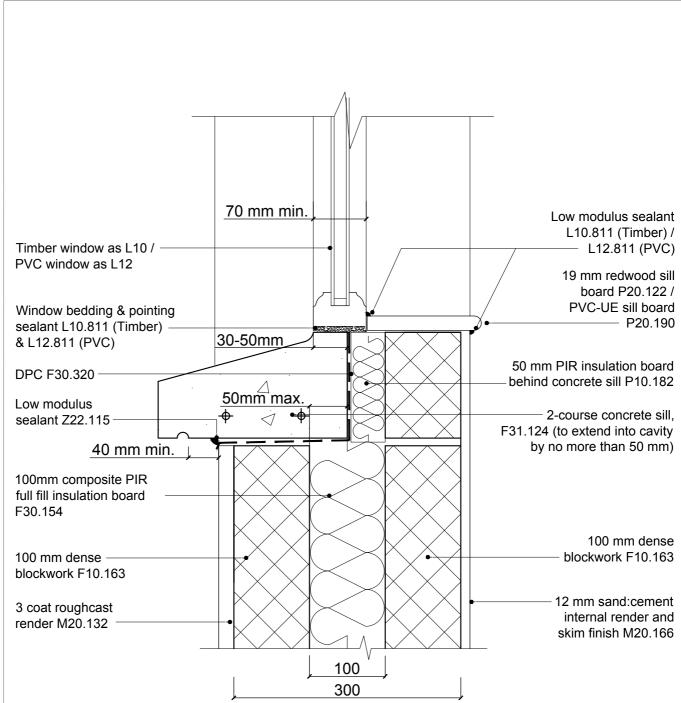




#### Notes:

- Proprietary cavity closer to provide 30 minutes fire resistance and thermal conductivity no greater than 0.038W/mK, F30.192.
- Stainless steel wall ties as F30.214 fixed and staggered at 900mm horizontal & 450mm vertically.
- Walls to have a U-value not greater than 0.28 W/m<sup>2</sup>K.
- Windows fitted as per NIHE Codes of Practice L10 (Timber) & L12 (PVC).
- Where a facing brick outer leaf is preferred apply clause F10.151 (general brickwork clause to be completed by the Designer) and clause F31.123 for concrete stooled sills.
- For 1-course concrete sills apply clauses F31.128 (blockwork) and F31.127 (brickwork).

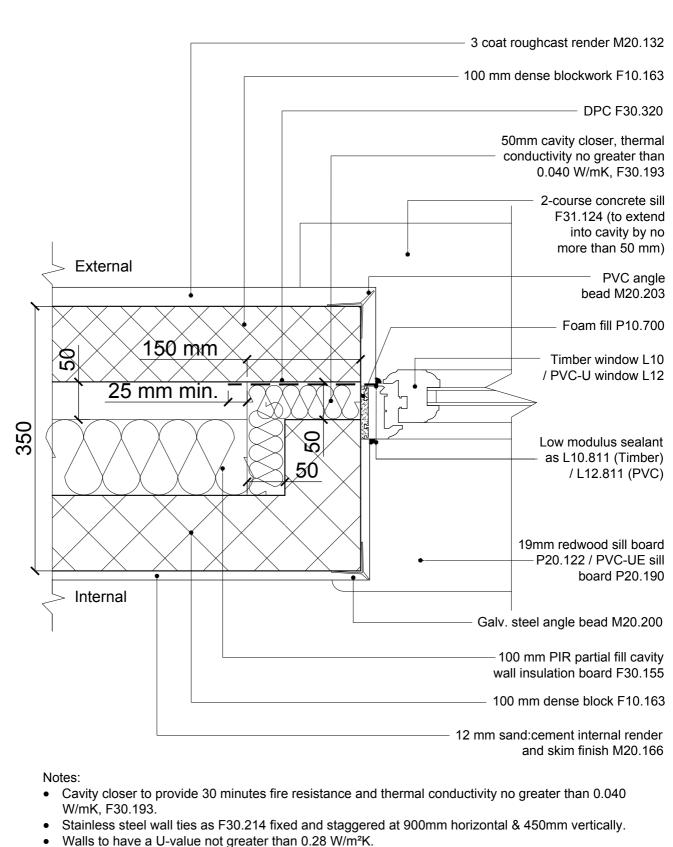
	TITLE	drawn by <b>P&amp;S</b>	SCALE 1:5	DATE Dec 90
Housing Executive	STANDARD PRECAST	DRAWING NO.	A(02.11	1)08
	CONCRETE SILL DETAIL 350 mm brick or rendered	REV NO. & DATE	(6) 10/1	4
BCNI Standards Panel Agreed *	cavity wall	REV NOTE: Updated for E	Building Co	ntrol <b>P</b> i



Notes:

- Stainless steel wall ties as F30.210 fixed and staggered at 900mm horizontal & 450mm vertically.
- A protective board should be used during construction of cavity wall to catch mortar droppings. Any mortar droppings that do fall within the cavity should be cleaned off.
- Walls to have a U-value not greater than 0.28 W/m<sup>2</sup>K.
- Windows fitted as per NIHE Codes of Practice L10 (Timber) & L12 (PVC).
- Where a facing brick outer leaf is preferred apply clause F10.151 (general brickwork clause to be completed by the Designer) and clause F31.123 for concrete stooled sills.
- For 1-course concrete sills apply clauses F31.128 (blockwork) and F31.127 (brickwork).
- Consideration should be given to the exposure of the site where brickwork outer leaf is proposed. (See insulation manufacturer's recommendations & consult Building Control).

	TITLE	drawn by <b>P&amp;S</b>	SCALE 1:5	DATE Dec 14
Housing Executive	ALTERNATIVE PRECAST CONCRETE SILL DETAIL	DRAWING NO.	A(02.1	1)09
BCNI Standards Panel Agreed *	300 mm brick or rendered cavity wall	REV NOTE:		Øi

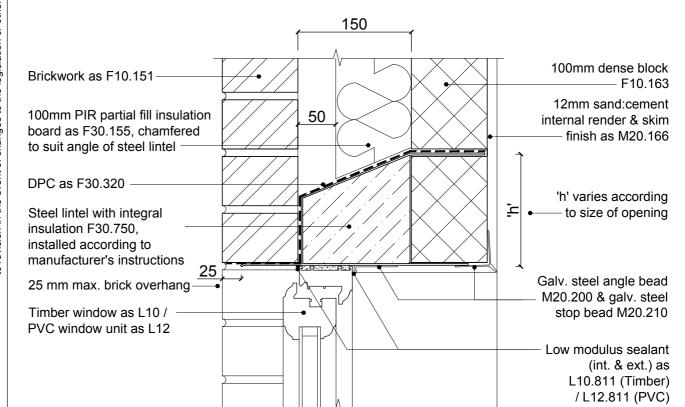


- Windows fitted as per NIHE Codes of Practice L10 (Timber) & L12 (PVC).
- Where a facing brick outer leaf is preferred apply clause F10.151 (general brickwork clause to be completed by the Designer) and clause F31.123 for concrete stooled sills.
- For 1-course concrete sills apply clauses F31.128 (blockwork) and F31.127 (brickwork).

	TITLE	drawn by <b>P&amp;S</b>	SCALE 1:5	DATE Feb 91
<b>Housing</b> Executive	INSULATED JAMB DETAIL FOR EXTERNAL OPENINGS	DRAWING NO.	A(02.1	1)14
	350 mm brick or rendered	REV NO. & DATE	(7) 10/2	14
BCNI Standards Panel Agreed *	cavity wall	REV NOTE: Updated for E	Building Cor	ntrol Pi

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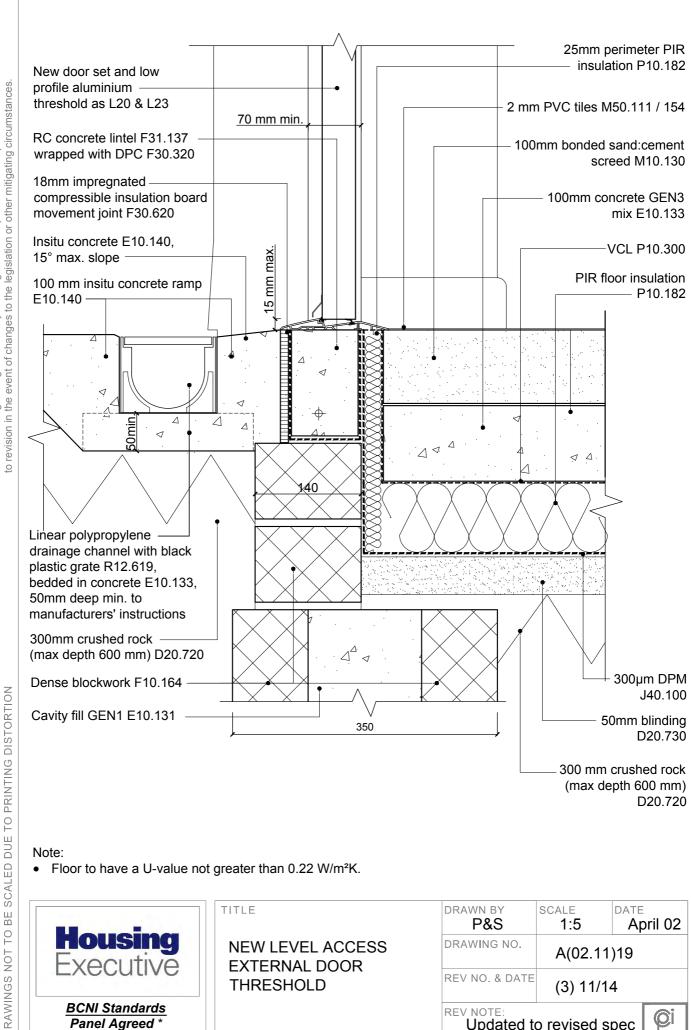


Notes:

- Stainless steel wall ties as F30.214 fixed and staggered at 900mm horizontal & 450mm vertically.
- Walls to have a U-value not greater than 0.28W/m<sup>2</sup>K.
- Windows fitted as per NIHE Code of Practice L10 (Timber) & L12 (PVC).
- Brickwork clause F10.151 is a general clause that must be completed by the Designer.
- Insulation to be chamfered to suit angle of steel lintel.

	TITLE	drawn by P&S	scale 1:5	DATE Sept 00
Housing Executive	STANDARD STEEL	DRAWING NO.	A(02.1	1)18
LACCULIVE	LINTEL DETAIL B	REV NO. & DATE	(3) 12/	14
BCNI Standards Panel Agreed *		REV NOTE: Updated for	Building Co	ntrol <b>Ø</b> İ

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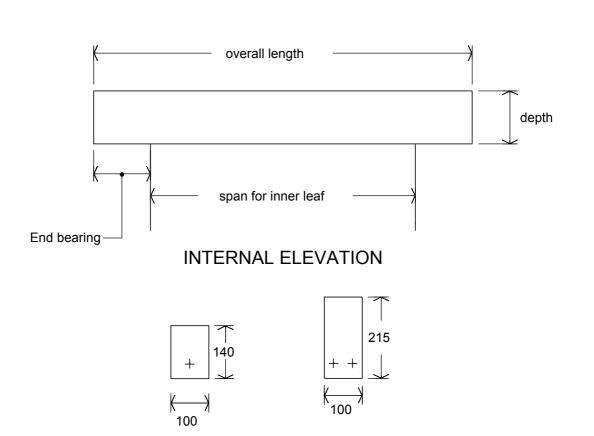


Updated to revised spec

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Panel Agreed '



# SECTION DETAILS

Span	Overall Length	End Bearing	Depth	Number of Courses	Size and Number of Reinforcement Bars
225	450	102	65	1	1no. T10mm
612	900	144	140	2	1no. T10mm
725	1025	150	140	2	1no. T10mm
837	1125	144	140	2	1no. T12mm
950	1250	150	140	2	1no. T12mm
1512	1800	144	215	3	1no. T16mm
1625	2000	188	215	3	2no. T12mm
1850	2250	200	215	3	2no. T12mm
2200	2600	200	215	3	2no. T16mm
2415	2800	193	215	3	2no. T16mm

# NOTES:

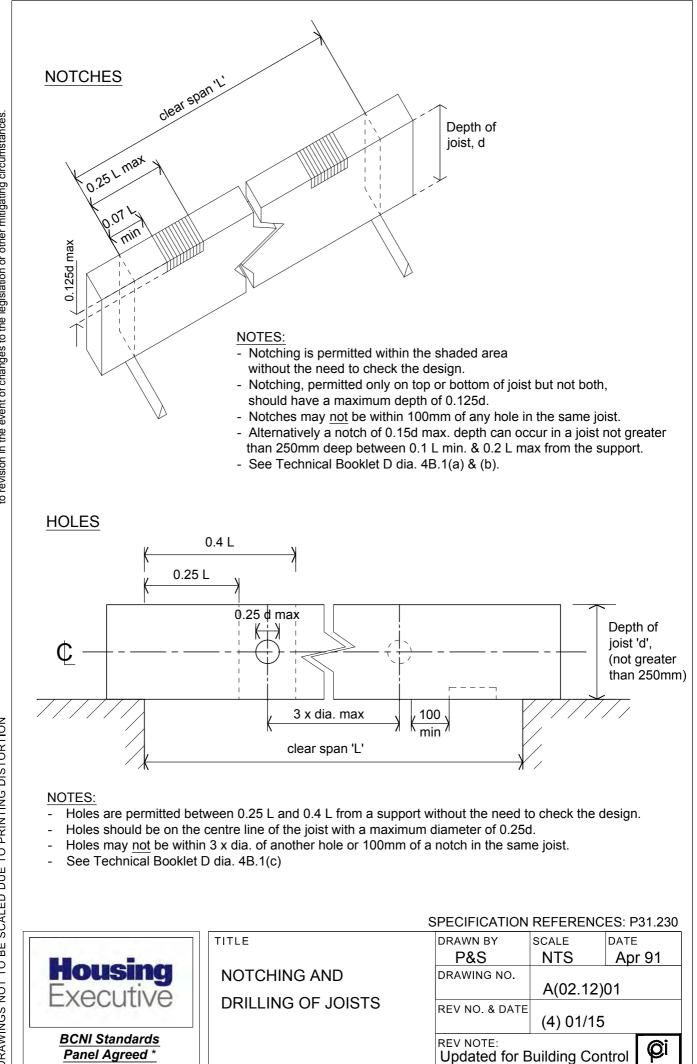
(1) Concrete mix to be as E10.135.

(2) Lintels spanning 600-2100mm inclusive wide openings are designed to carry a timber floor loading up to spans of 4.5m, and lintels spanning over 2400mm openings are for 4m spans.

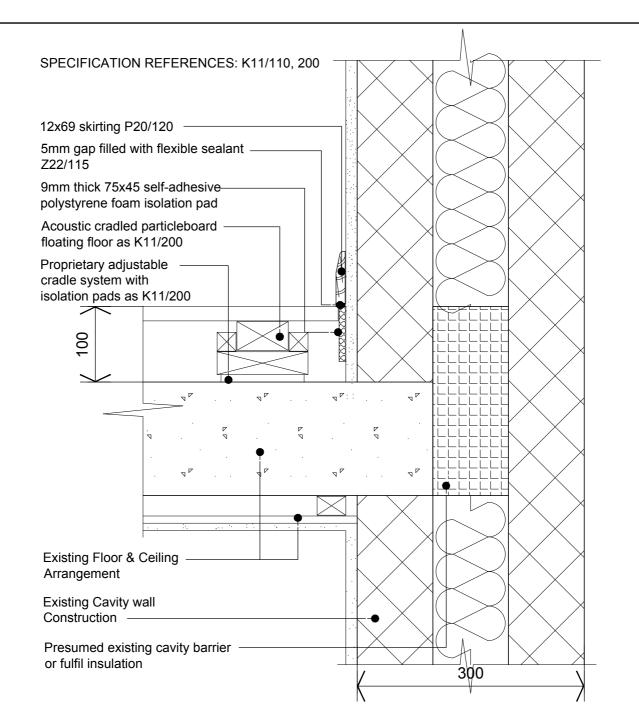
(3) Special designs are required for lintels supporting floors greater than spans noted.

- (4) Also suitable for supporting outside leaf with no floor.
- (5) Cover to be: 40mm bottom, 20mm top and side.
- (6) 450 lintel for use over slow bend.
- (7) Lintels supporting concrete floors should be proprietary steel lintels as F30.750, designed by manufacturer.

		SPECIFIC	ATION RE	F: F31/137
<b>Housing</b> Executive	TITLE CONCRETOR SCHEDULE standard precast concrete lintels supporting timber floors	DRAWN BY	scale 1:10	DATE July 90
		DRAWING NO.	S(02.11)	01
		REV NO. & DATE	(5) 11/1	4
BCNI Standards Panel Agreed *		REV NOTE: Updated for	Building Co	ontrol <b>P</b> i



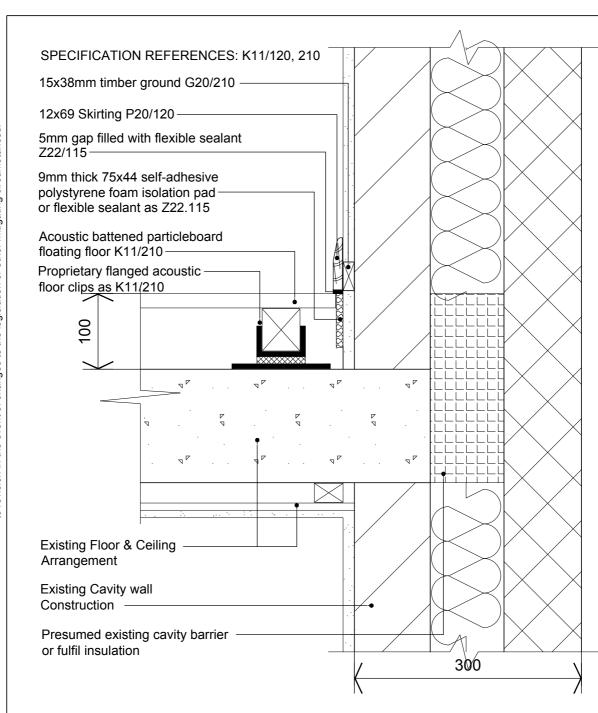
DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION



### NOTES:

- Spacing of cradles should comply with BS EN1991-1-7:2006+A1:2014 for domestic floor loadings: 0.4kN.m<sup>2</sup> dead load & 1.5kN.m<sup>2</sup> distributed load.
- Additional supports may be required under heavy appliances, eg. baths.
- Ensure manufacturer of floating floor system has a laboratory sound test report that demonstrates compliance with performance criteria.
- Renovation works to existing residential units should cause no new or greater contravention to the Regulations.
- New Build projects and Material Change of Use projects must comply with Building Regulations TB-G.
- Where floor & ceiling heights are restrictive, consider laying a resilient overlay on concrete floor as P10.330.

DRAWINGS NOT TO BE SC.		SOUND INSULATED FLOATING FLOOR TO EXISTING FLATS (IRREGULAR SURFACES)	drawn by P&S	SCALE 1:5	date <b>A</b>	pr 91
	<b>Housing</b> Executive		DRAWING NO.	A(02.12)03		
			REV NO. & DATE	(6) 07/16		
	BCNI Standards Panel Agreed *		REV NOTE: Updated for E	Building Cor	ntrol	<b>@</b> i



#### NOTES:

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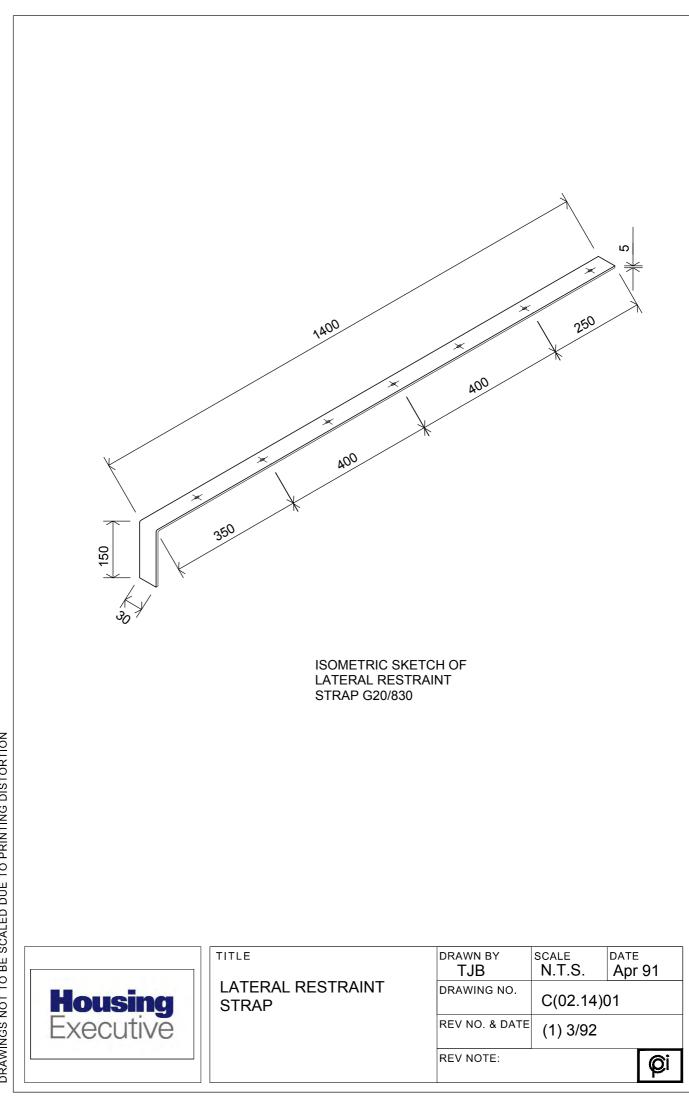
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- Spacing of cradles should comply with BS EN1991-1-7:2006+A1:2014 for domestic floor loadings: 0.4kN.m<sup>2</sup> dead load & 1.5kN.m<sup>2</sup> distributed load.
- Additional supports may be required under heavy appliances, eg. baths.
- Ensure manufacturer of floating floor system has a laboratory sound test report that demonstrates compliance with performance criteria.
- Renovation works to existing residential units should cause no new or greater contravention to the Regulations.
- New Build projects and Material Change of Use projects must comply with Building Regulations TB-G.
- Where floor & ceiling heights are restrictive, consider laying a resilient overlay on concrete floor as P10.330.

SCALED					
BE			drawn by P&S	scale 1:5	Apr 91
NOT TO	<b>Housing</b> Executive	SOUND INSULATED FLOATING FLOOR TO	DRAWING NO.	A(02.12)04	
		EXISTING FLATS (REGULAR SURFACES)	REV NO. & DATE	(6) 07/1	6
DRAWINGS	BCNI Standards Panel Agreed *		REV NOTE:	Revised not	es <b>Ø</b> İ

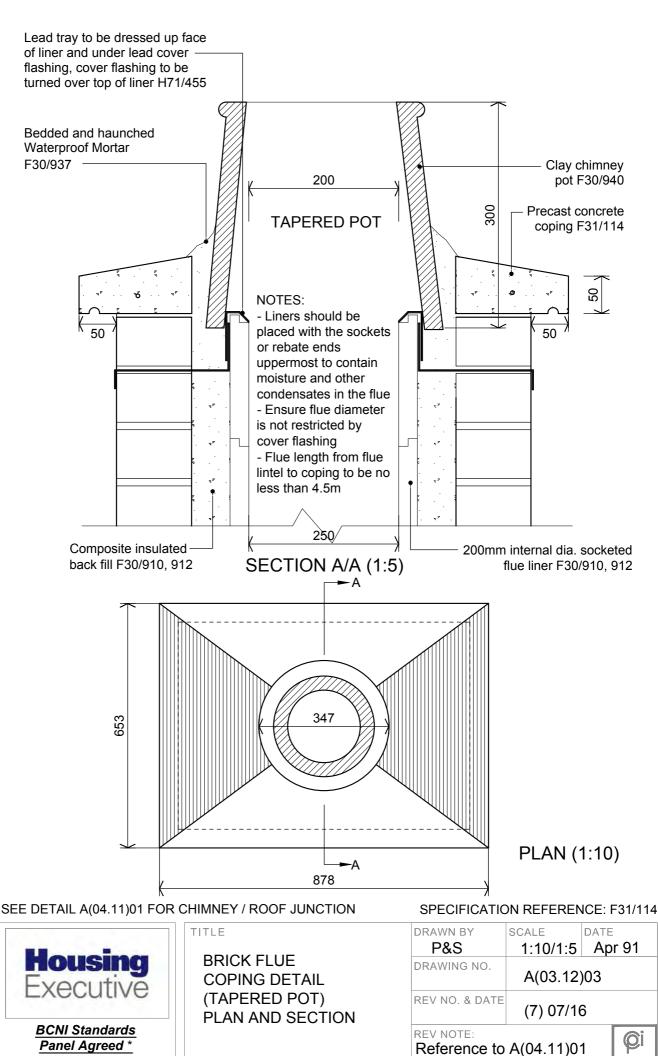
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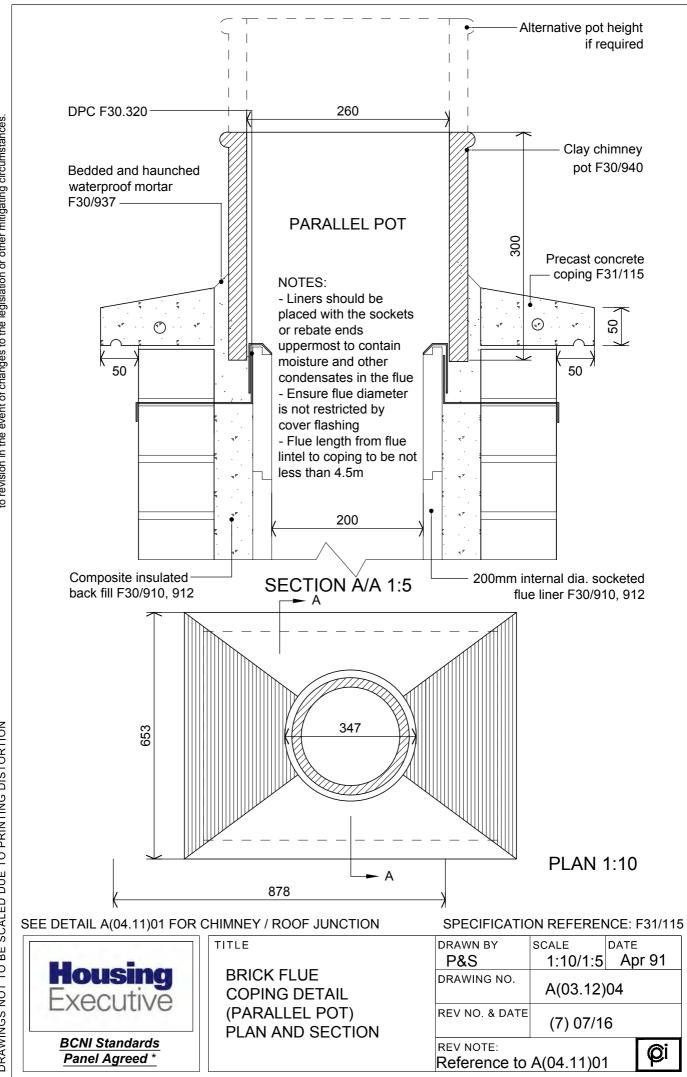
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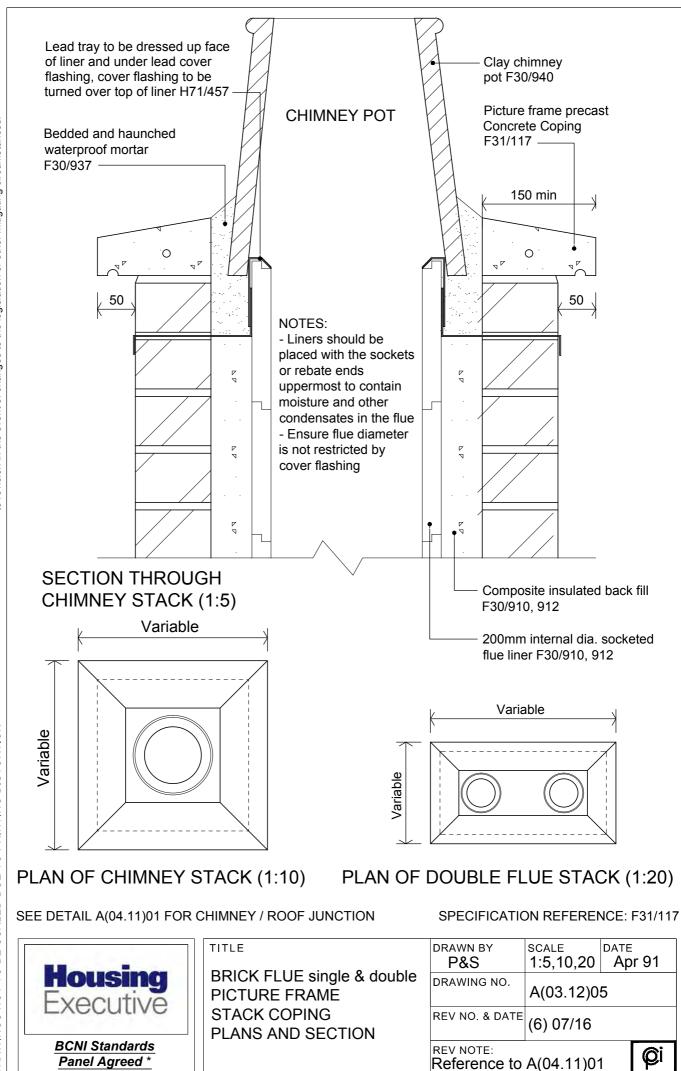


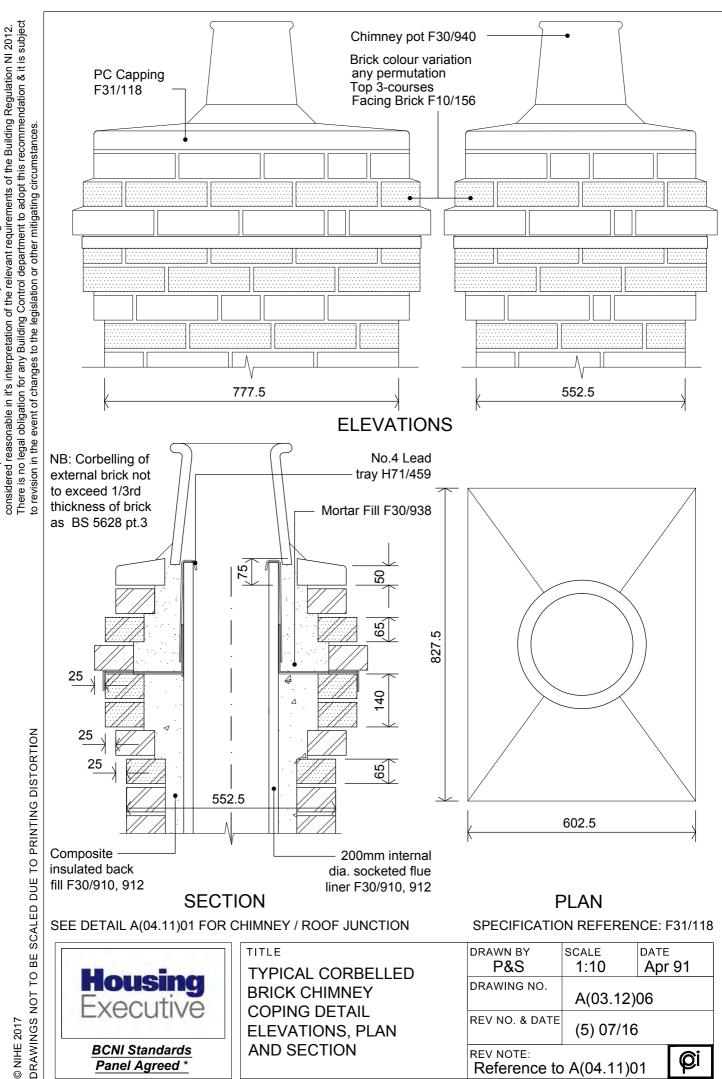


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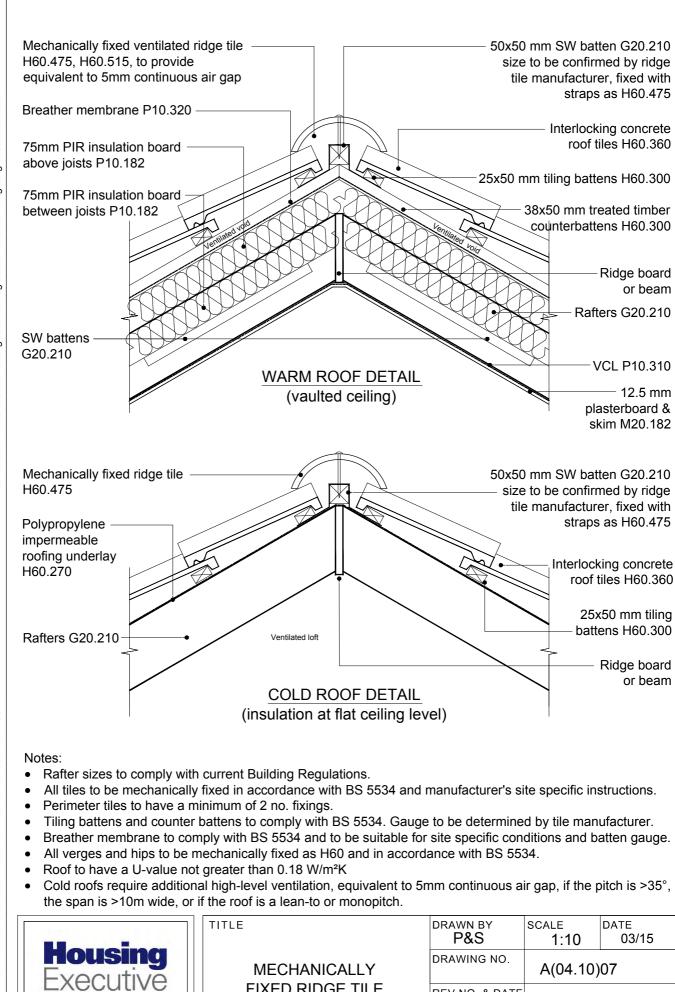
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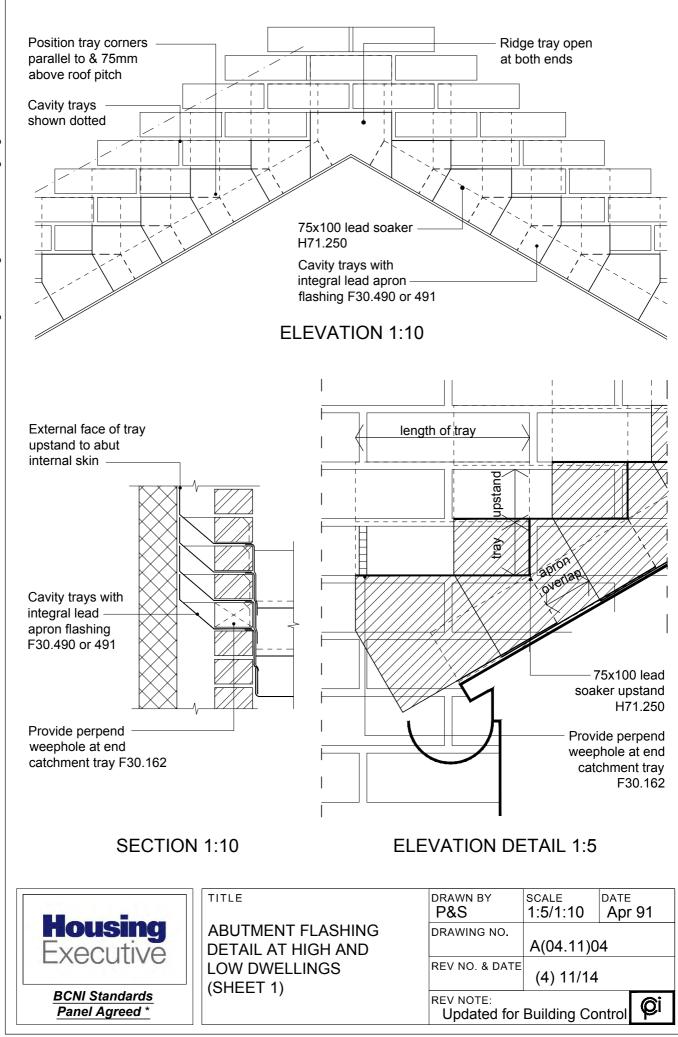
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Housing Executive		drawn by P&S	SCALE DATE 1:10 03/15	
		DRAWING NO.	A(04.10)07	
		REV NO. & DATE	(4) 11/16	3
<u>BCNI Standards</u> Panel Agreed *		REV NOTE: Updated spec clauses & notes		

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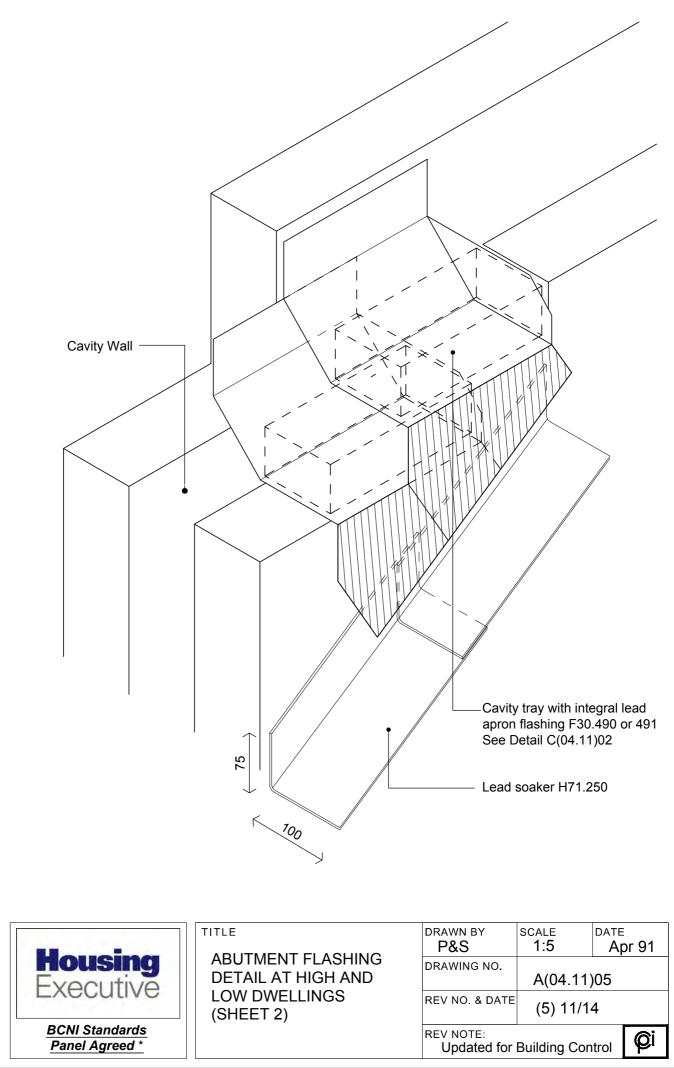
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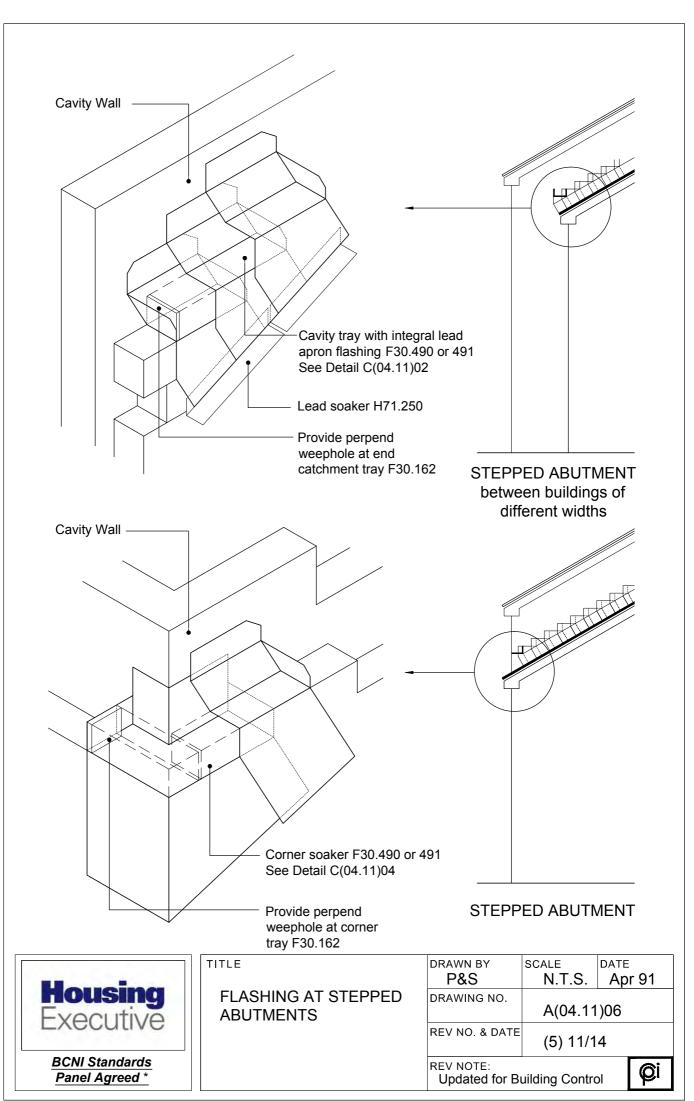
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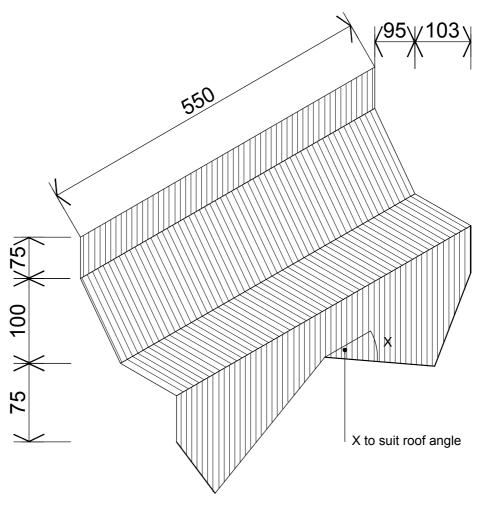


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**ISOMETRIC VIEW** 

SPECIFICATION REF: F30/490

Housing Executive		drawn by TJB	SCALE 1:5	DATE Oct 90
	(Lead-Tray	DRAWING NO.	C(04.11)02 (2) 6/03	
<u>BCNI Standards</u> Panel Agreed *		REV NOTE:		Pi



ISOMETRIC VIEW

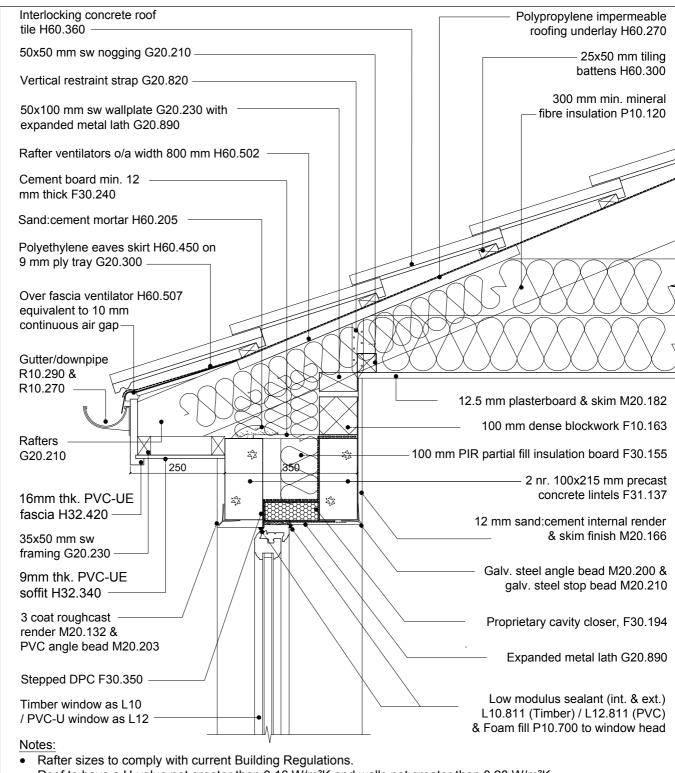
# SPECIFICATION REF: F30/490, 491

	TITLE	DRAWN BY	SCALE	DATE Oct 90
Housing Executive	RIDGE CAVITY TRAY (Lead-Tray OR Plastic-with-Leaded-apron)	DRAWING NO.	1:5 C(04.11)0	
		REV NO. & DATE	(2) 10/12	
<u>BCNI Standards</u> Panel Agreed *		REV NOTE: Updated to	o revised s	pec Pi

There is no legal obligation for any Building Control department to adopt this recommendation & it is subject to revision in the event of changes to the legislation or other mitigating circumstances. 145 30 <sup>1</sup>00 150 ვვნ 220 angle to suit roof pitch DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION External angle **ISOMETRIC VIEW** NOTE: Provide perpend weep holes at lowest cavity tray. SPECIFICATION REF: F30/490, 491 TITLE DRAWN BY SCALE DATE TJB/CB 1:5 Oct 90 Housing EAVES CAVITY TRAY DRAWING NO. C(04.11)04 Executive (Lead REV NO. & DATE © NIHE 2017 OR (3) 10/12 Plastic-with-Leaded-apron) **BCNI Standards** REV NOTE: Øi Panel Agreed \* Updated to revised spec

This NIHE produced detail has been examined by The Building Control N.I. Standards Panel and has been considered reasonable in it's interpretation of the relevant requirements of the Building Regulation NI 2012.

\*

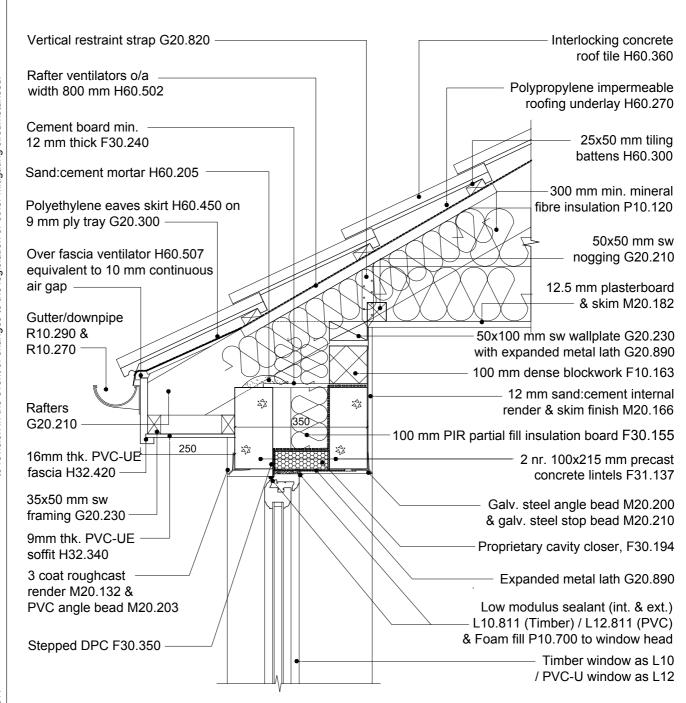


- Roof to have a U-value not greater than 0.16 W/m<sup>2</sup>K and walls not greater than 0.28 W/m<sup>2</sup>K.
- All tiling, including verges and hips, to be mechanically fixed in accordance with current version of BS 5534 and manufacturer's site specific instructions. Perimeter tiles to have a minimum of 2 no. fixings.
- Underlay, tiling battens & counterbattens to comply with current version of BS 5534. Spacing of battens to be determined by tile manufacturer.
- Proprietary cavity closer to provide 30 minutes fire resistance and thermal conductivity no greater than 0.038W/mK, F30.194.
- Stainless steel wall ties as F30.214 fixed and staggered at 900mm horizontal & 450mm vertically.
- Windows fitted as per NIHE Codes of Practice L10 (Timber) & L12 (PVC).
- Where a facing brick outer leaf is preferred apply clause F10.151(general brickwork clause to be completed by the Designer). See Detail A(02.11)18 for insulated steel lintel.

	TITLE	drawn by P&S	scale 1:10	DATE Apr	r 91
<b>Housing</b> Executive	TYPICAL EAVES DETAIL 22.5° PITCH	DRAWING NO.	A(04.1	2)02	
		REV NO. & DATE	(8) 04/	17	
BCNI Standards Panel Agreed *	(350mm cavity wall)	REV NOTE: Cavity closer location, PVC fascia & soffit			<b>p</b> i

This NIHE produced detail has been examined by The Building Control N.I. Standards Panel and has been considered reasonable in it's interpretation of the relevant requirements of the Building Regulation NI 2012. There is no legal obligation for any Building Control department to adopt this recommendation & it is subject to revision in the event of changes to the legislation or other mitigating circumstances.

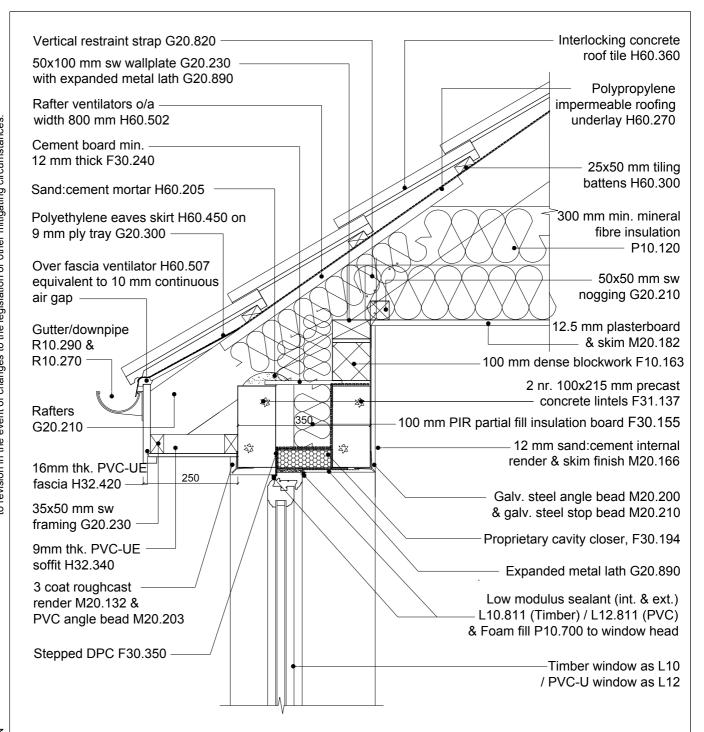
\*



### Notes:

- Rafter sizes to comply with current Building Regulations.
- Roof to have a U-value not greater than 0.16 W/m<sup>2</sup>K and walls not greater than 0.28 W/m<sup>2</sup>K.
- All tiling, including verges and hips, to be mechanically fixed in accordance with current version of BS 5534 and manufacturer's site specific instructions. Perimeter tiles to have a minimum of 2 no. fixings.
- Underlay, tiling battens & counterbattens to comply with current version of BS 5534. Spacing of battens to be determined by tile manufacturer.
- Proprietary cavity closer to provide 30 minutes fire resistance and thermal conductivity no greater than 0.038W/mK, F30.194.
- Stainless steel wall ties as F30.214 fixed and staggered at 900mm horizontal & 450mm vertically.
- Windows fitted as per NIHE Codes of Practice L10 (Timber) & L12 (PVC).
- Where a facing brick outer leaf is preferred apply clause F10.151(general brickwork clause to be completed by the Designer). See Detail A(02.11)18 for insulated steel lintel.

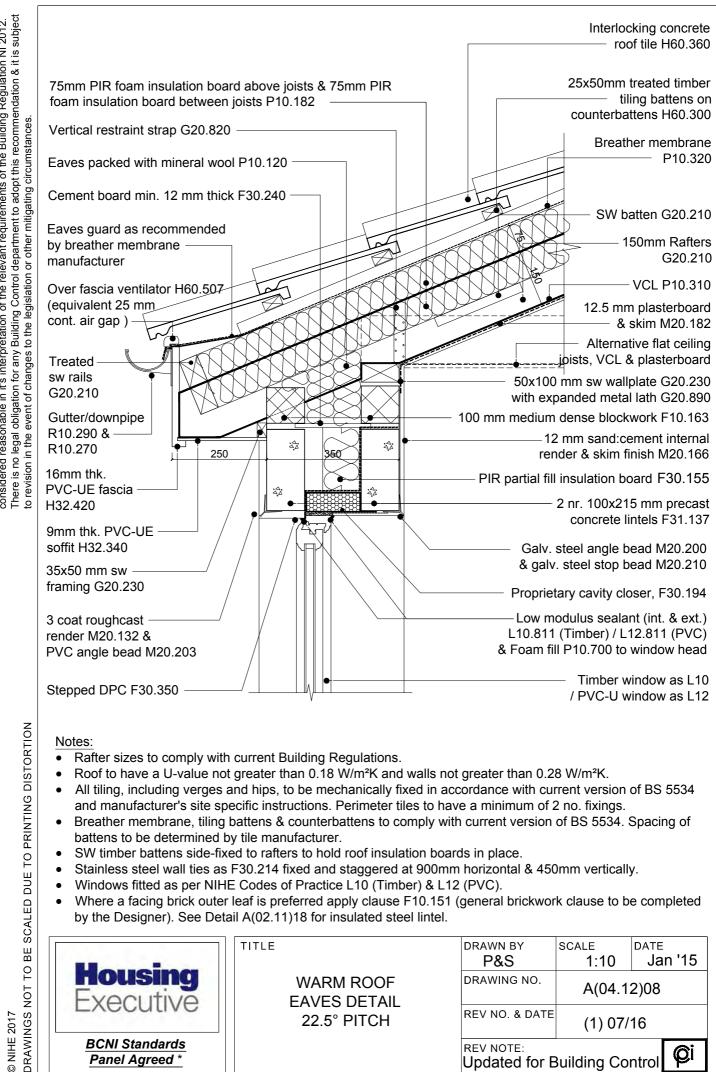
	TITLE	drawn by <b>P&amp;S</b>	scale 1:10	date Apr 91
<b>Housing</b> Executive	TYPICAL EAVES DETAIL	DRAWING NO.	A(04.1	2)03
	30° PITCH	REV NO. & DATE	(12) 04	/17
BCNI Standards Panel Agreed *		REV NOTE: Cavi PV	ty closer loca C fascia & sc	



### Notes:

- Rafter sizes to comply with current Building Regulations.
- Roof to have a U-value not greater than 0.16 W/m<sup>2</sup>K and walls not greater than 0.28 W/m<sup>2</sup>K.
- All tiling, including verges and hips, to be mechanically fixed in accordance with current version of BS 5534 and • manufacturer's site specific instructions. Perimeter tiles to have a minimum of 2 no. fixings.
- Underlay, tiling battens & counterbattens to comply with current version of BS 5534. Spacing of battens to be • determined by tile manufacturer.
- Proprietary cavity closer to provide 30 minutes fire resistance and thermal conductivity no greater than 0.038W/mK, F30.194.
- Stainless steel wall ties as F30.214 fixed and staggered at 900mm horizontal & 450mm vertically.
- Windows fitted as per NIHE Codes of Practice L10 (Timber) & L12 (PVC). •
- Where a facing brick outer leaf is preferred apply clause F10.151(general brickwork clause to be completed by • the Designer). See Detail A(02.11)18 for insulated steel lintel.

SCALED DUE TO PRINTING DISTORTION	<ul> <li>All tiling, including verges at manufacturer's site specific</li> <li>Underlay, tiling battens &amp; condetermined by tile manufact</li> <li>Proprietary cavity closer to p 0.038W/mK, F30.194.</li> <li>Stainless steel wall ties as F</li> <li>Windows fitted as per NIHE</li> <li>Where a facing brick outer I</li> </ul>	greater than 0.16 W/m <sup>2</sup> K and walls not g nd hips, to be mechanically fixed in acco instructions. Perimeter tiles to have a min punterbattens to comply with current vers	rdance with curren nimum of 2 no. fix ion of BS 5534. S ermal conductivity orizontal & 450mi PVC).	nt version of E ings. pacing of batt v no greater th m vertically.	tens to be nan
BE		TITLE	DRAWN BY	scale 1:10	date <b>Apr 91</b>
NOT TO	Housing Executive	TYPICAL EAVES DETAIL 35° PITCH	DRAWING NO.	A(04.1	2)04
			REV NO. & DATE	(8) 04/1	17
DRAWINGS	BCNI Standards Panel Agreed *	(350mm cavity wall)	REV NOTE: Cavi PV	ty closer loca C fascia & so	



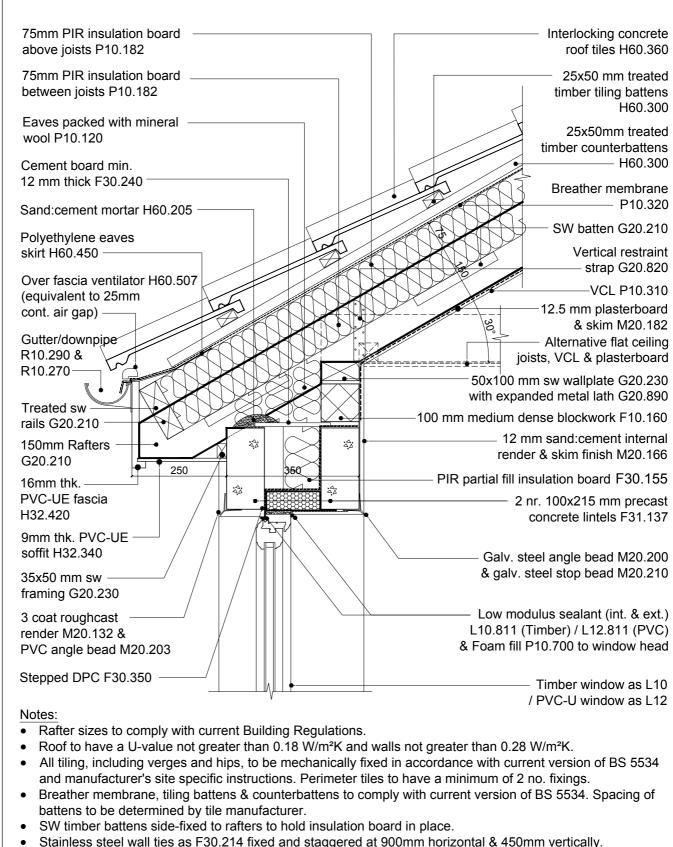
This NIHE produced detail has been examined by The Building Control N.I. Standards Panel and has been considered reasonable in it's interpretation of the relevant requirements of the Building Regulation NI 2012.

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DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION

Panel Agreed \*

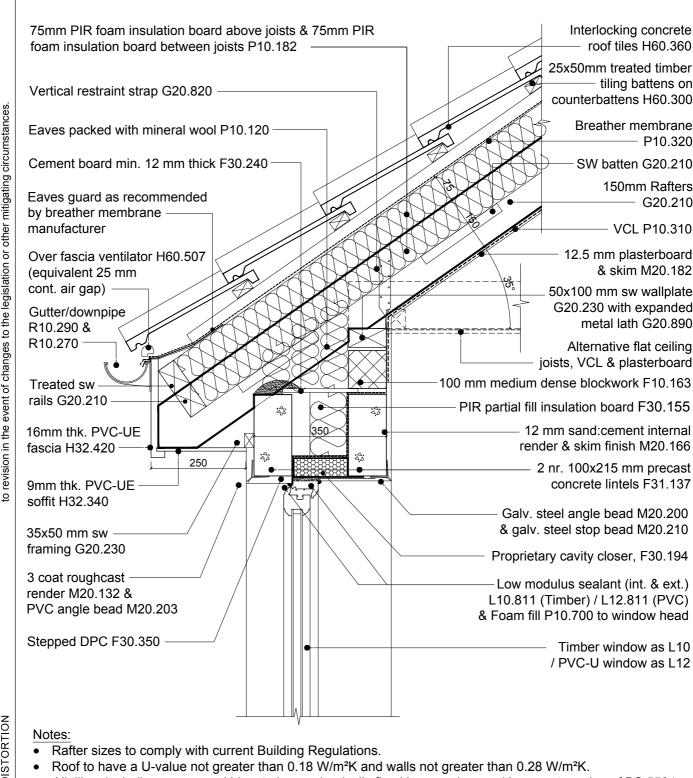
Updated for Building Control



- Windows fitted as per NIHE Codes of Practice L10 (Timber) & L12 (PVC).
- Where a facing brick outer leaf is preferred apply clause F10.151(general brickwork clause to be completed by the Designer). See Detail A(02.11)18 for insulated steel lintel.

	TITLE	DRAWN BY P&S	scale 1:10	date Jan '15
Housing Executive	WARM ROOF	DRAWING NO.	A(04.1	2)09
	EAVES DETAIL 30° PITCH	REV NO. & DATE	(1) 07/	16
BCNI Standards Panel Agreed *		REV NOTE: Updated for E	Building Co	ntrol <b>Ø</b> İ

DUE TO PRINTING DISTORTION DRAWINGS NOT TO BE SCALED



- All tiling, including verges and hips, to be mechanically fixed in accordance with current version of BS 5534 and manufacturer's site specific instructions. Perimeter tiles to have a minimum of 2 no. fixings.
- Breather membrane, tiling battens & counterbattens to comply with current version of BS 5534. Spacing of battens to be determined by tile manufacturer.
- SW timber battens side-fixed to rafters to hold insulation board in place.
- Stainless steel wall ties as F30.214 fixed and staggered at 900mm horizontal & 450mm vertically.
- Windows fitted as per NIHE Codes of Practice L10 (Timber) & L12 (PVC).
- Where a facing brick outer leaf is preferred apply clause F10.151(general brickwork clause to be completed by the Designer). See Detail A(02.11)18 for insulated steel lintel.

	TITLE	drawn by <b>P&amp;S</b>	scale 1:10	date Jan '1	15
Housing Executive	WARM ROOF EAVES DETAIL	DRAWING NO.	A(04.1	2)10	
	35° PITCH	REV NO. & DATE	(2) 04/2	17	
BCNI Standards Panel Agreed *		REV NOTE: Cavi	ty closer loca	ition 🖗	)ji

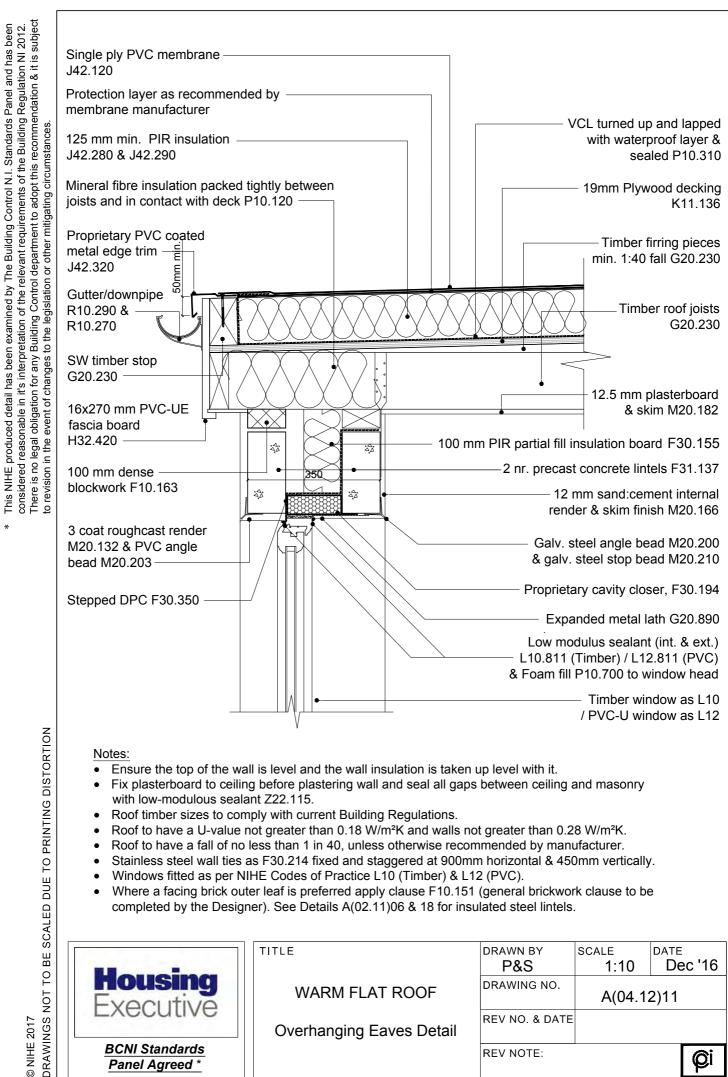
This NIHE produced detail has been examined by The Building Control N.I. Standards Panel and has been considered reasonable in it's interpretation of the relevant requirements of the Building Regulation NI 2012. There is no legal obligation for any Building Control department to adopt this recommendation & it is subject to revision in the event of changes to the legislation or other mitigating circumstances.

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ol department to adopt this recommendatic on or other mitigating circumstances. M A C T G I I S I S I S I S I S I S I S I S I S	ingle Ply xed Mem rotection y manufa 25 mm Pl ver joists CL turned ith water	hing H71.320 mechanically brane J42.120 layer as recommend acturer J42.120 IR insulation J42.280 & J42.290 d up and lapped proof layer &	ed					C Tray	etrofit polypr trays fitted cavity wall a – of the flat y upstand to t internal fac —— Per Proprietary	within long the roof at be pus ce of in pend we metal	existing e length outmen shed up ner lea eephole F30.162
Ti m Ti 12	imber firr iin. 1:40 f imber roc 2 mm sar	wood decking K11.13 ing pieces fall G20.230 of joists G20.230 hd:cement internal kim finish M20.166						25 r	mm PIR insi	I ng 300r	P10.18
BE SCALED DUE TO PRINTING DISTORTION	<ul> <li>Ens</li> <li>Fix low</li> <li>Roo</li> <li>Roo</li> <li>Roo</li> <li>Sta</li> <li>Win</li> <li>When constants</li> </ul>	hen fitting cavity trays sure the top of the wal plasterboard to ceiling -modulous sealant Z2 of timber sizes to com of to have a U-value n of to have a fall of no ainless steel wall ties a ndows fitted as per NI here a facing brick out mpleted by the Design	I is level ar g before pla 22.115. ply with cul ot greater t less than 1 as F30.214 HE Codes er leaf is pr	nd the wall astering wa rrent Buildin than 0.18 V in 40, unle fixed and s of Practice referred app	insulation is ill and seal ng Regulati V/m²K and ss otherwis staggered a L10 (Timbo oly clause F	s taken u all gaps ions. walls no se recom t 900mn er) & L12 -10.151	t greater mended h horizor (general	than 0.2 by manu thal & 450 brickwor eel lintels	and masonry 8 W/m²K. ufacturer. 0mm vertica rk clause to	y with Ily. be	ec '16
© NIHE 2017 DRAWINGS NOT TO BE	Exe	Cutive		ARM FLA Abutmen		=	DRAWIN	IG NO. . & DATE	A(04.		<u>¢</u> i

\* This NIHE produced detail has been examined by The Building Control N.I. Standards Panel and has been considered reasonable in it's interpretation of the relevant requirements of the Building Regulation NI 2012.

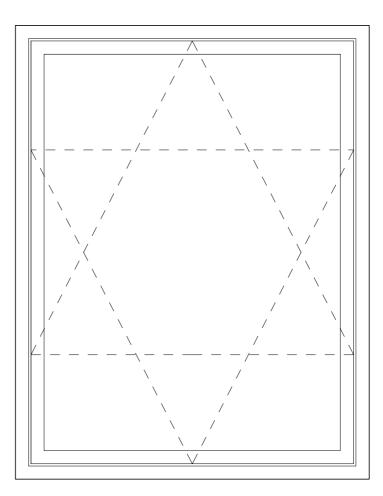
© NIH DRAW



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\*

	TITLE	drawn by P&S	scale 1:10	DATE Dec '16
Housing Executive	WARM FLAT ROOF	DRAWING NO.	A(04.1	2)11
LXECULIVE	Overhanging Eaves Detail	REV NO. & DATE		
BCNI Standards Panel Agreed *		REV NOTE:		Øi

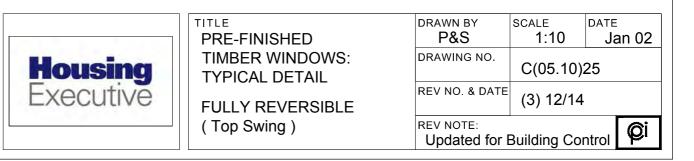


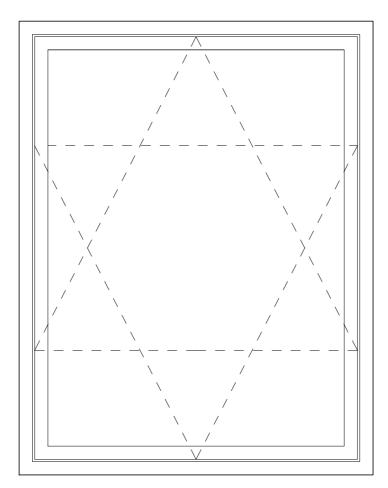
## **External Elevation**

### NOTES:

- Pre-finished Timber Windows to be manufactured in accordance with The NIHE Code of Practice L10: 'SPECIFICATION, SURVEY & INSTALLATION OF PRE-FINISHED TIMBER WINDOWS & SIDELIGHTS'

- Background / trickle ventilation to be provided in accordance with the above Code of Practice, i.e: 8000mm<sup>2</sup> min. equivalent area to habitable rooms, and 4000mm<sup>2</sup> min.equivalent area to kitchens, & bathrooms.





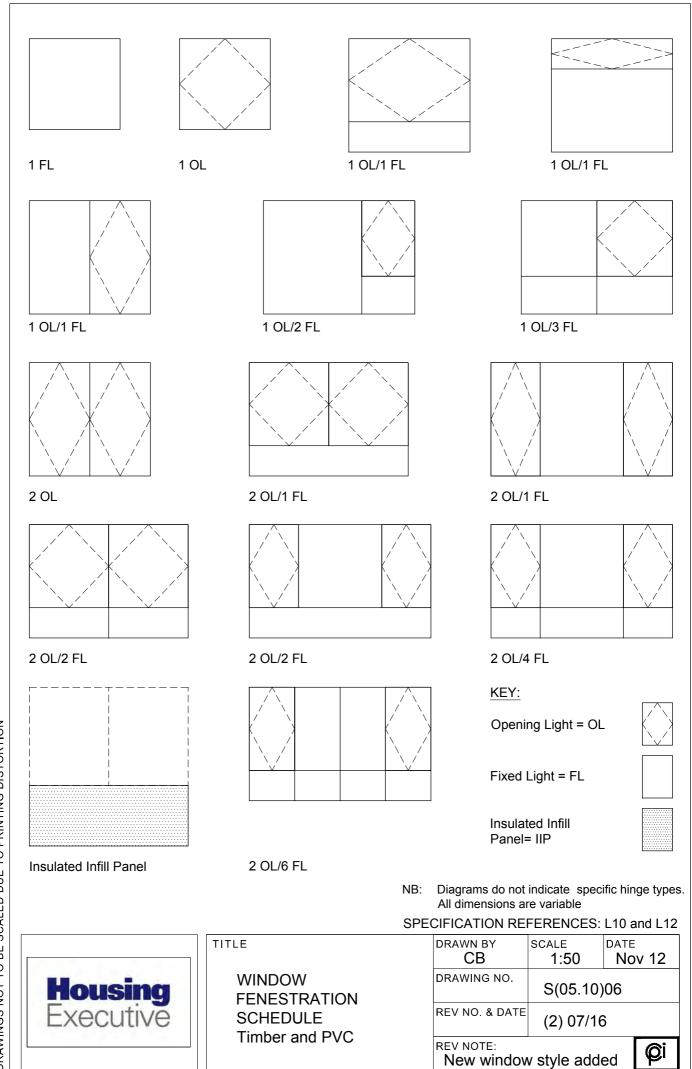
# **External Elevation**

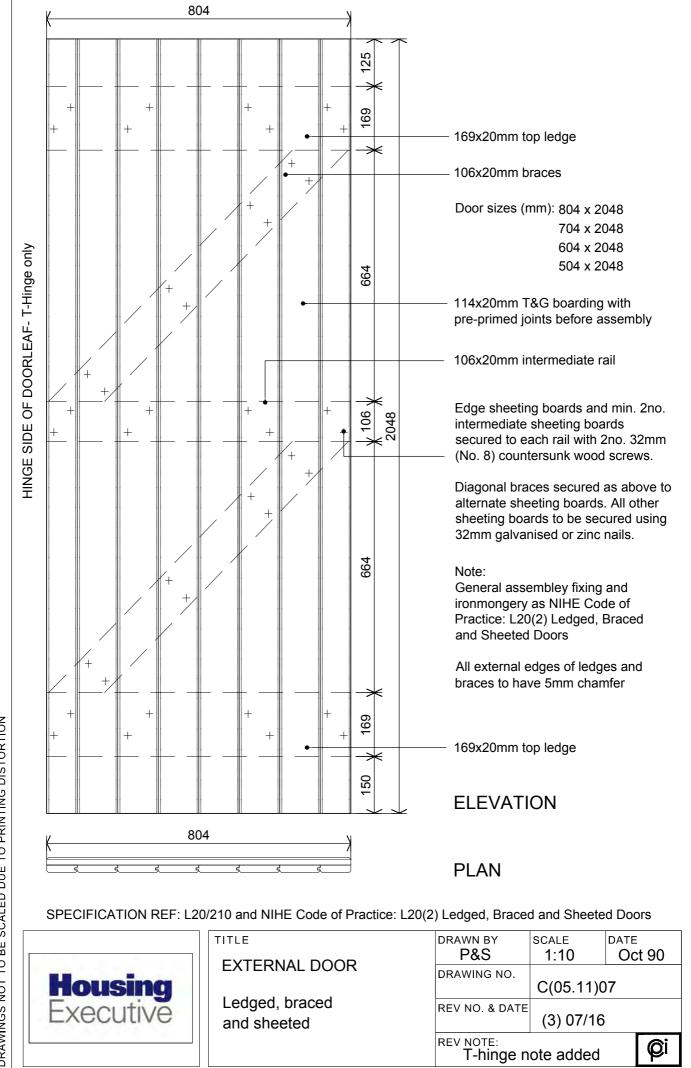
NOTES:

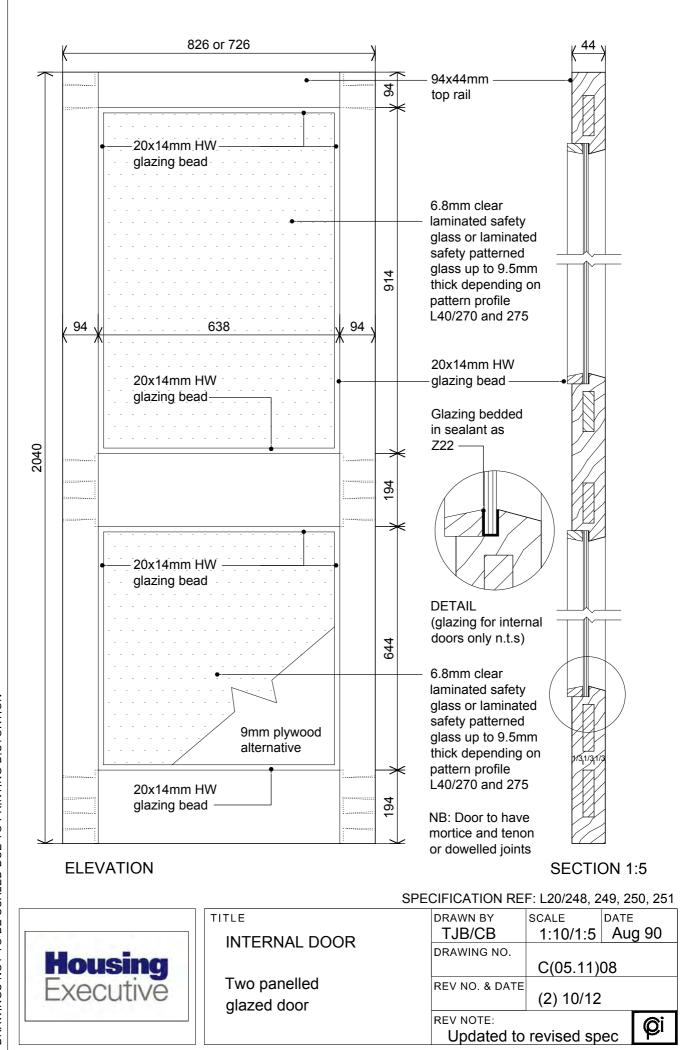
- Pre-finished Timber Windows to be manufactured in accordance with The NIHE Code of Practice L12: 'SPECIFICATION, SURVEY & INSTALLATION OF PVC-U WINDOWS & SIDELIGHTS'

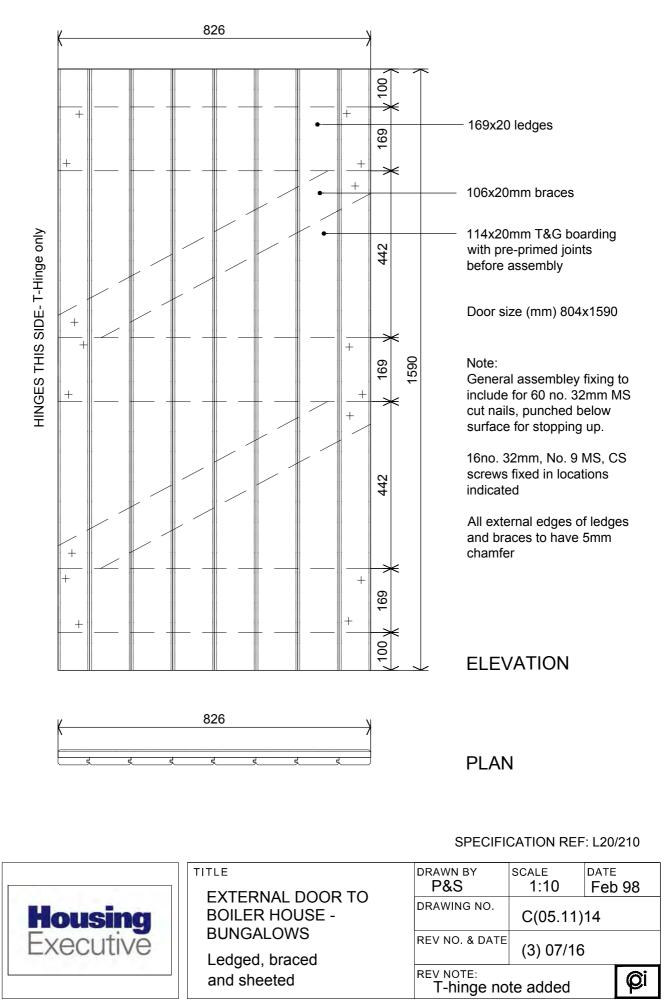
- Background / trickle ventilation to be provided in accordance with the above Code of Practice, i.e: 8000mm<sup>2</sup> min. equivalent area to habitable rooms, and 4000mm<sup>2</sup> min.equivalent area to kitchens, & bathrooms.

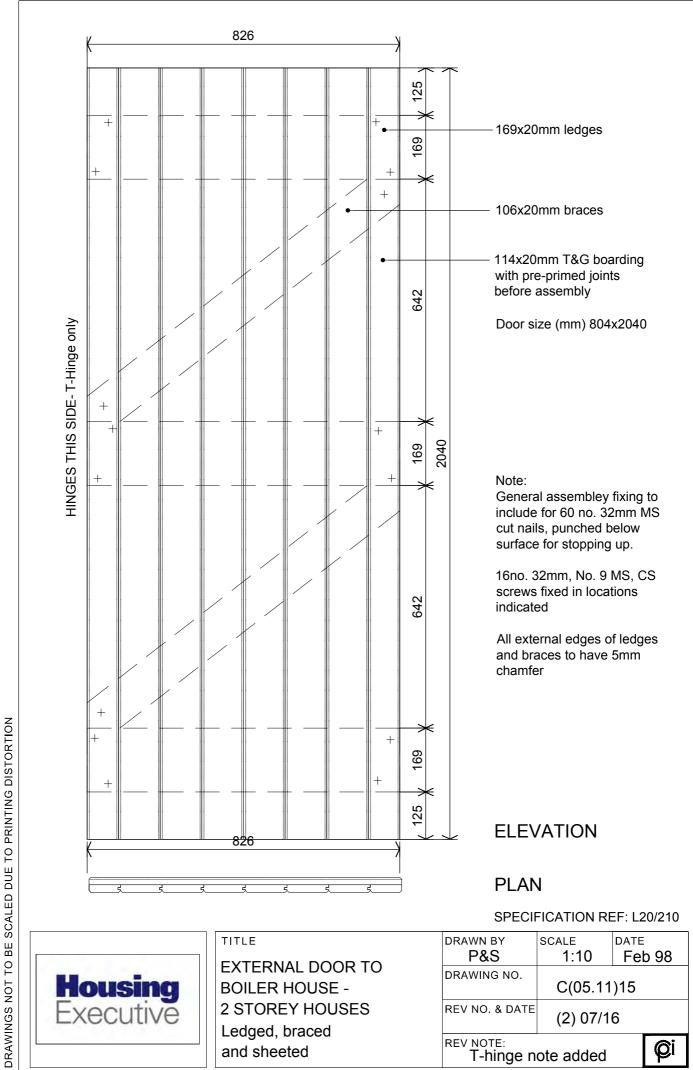
		drawn by P&S			
Housing	PVCu WINDOWS TYPICAL DETAIL	DRAWING NO.	C(05.10)2	28	
Executive	FULLY REVERSIBLE	REV NO. & DATE	(2) 11/14		
	( Top Hung )	REV NOTE: Updated for E	Building Cor	ntrol	Øi

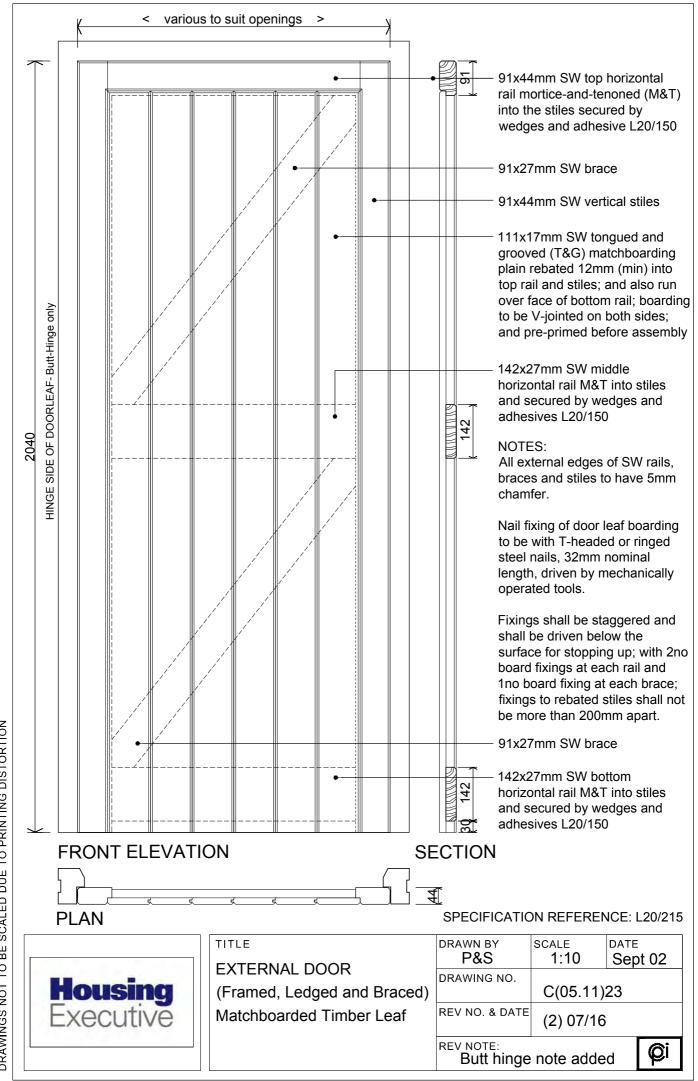


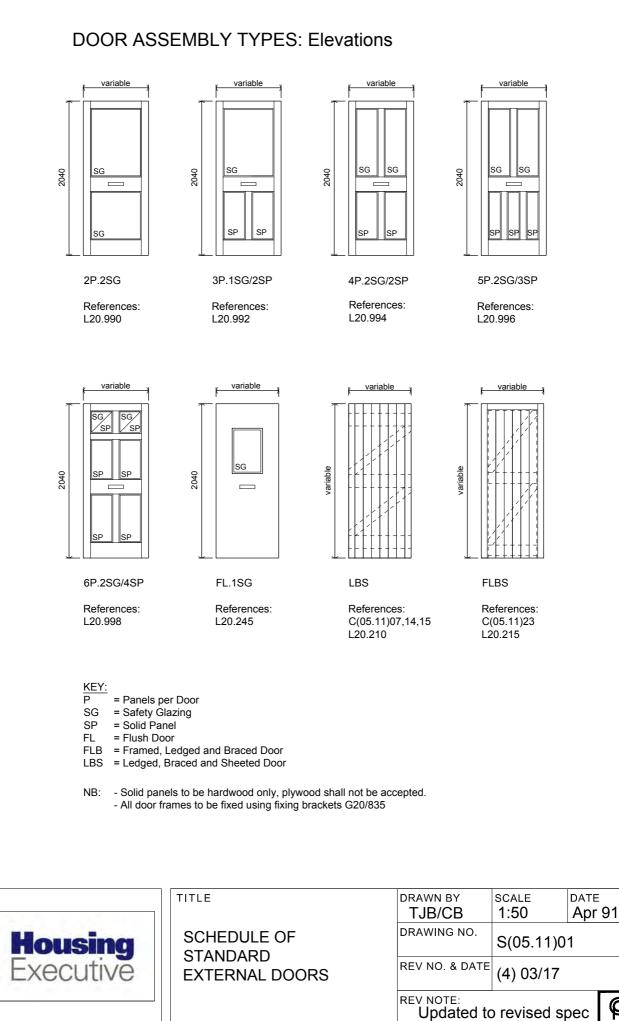






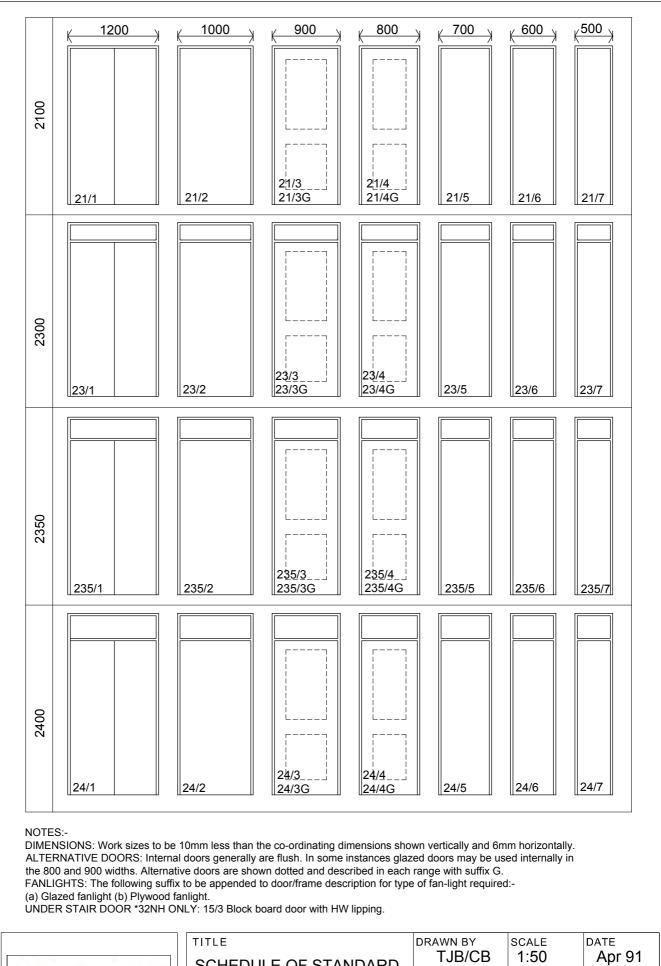




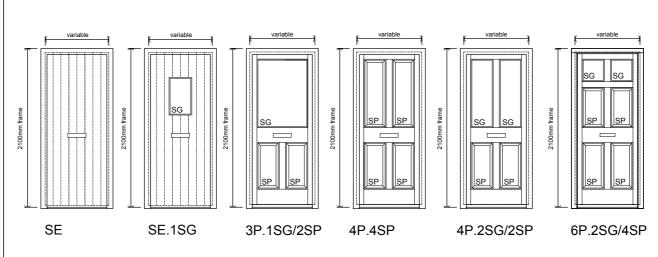


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		drawn by TJB/CB	scale 1:50	date Apr 91
Housing Executive	INTERNAL DOORS AND	DRAWING NO.	S(05.11)	)2
	FRAMES	REV NO. & DATE	(2) 01/13	
		REV NOTE: Updated to	revised sp	ec <b>©</b> i



COMPOSITE DOOR ASSEMBLY TYPES: Elevations

			GRP	COMPOSITE D	OOR	STEEL	COMPOSITE	DOOR
				FRAME TYPE		FRAME TYPE		
			NEW WOOD	NEW PVC	EXISTING	NEW WOOD	NEW PVC	EXISTING
	20 400 200	WOODGRAIN	L23.200	L23.201	L23.210	L23.220	N/A	L23.230
	3P. 1SG/2SP	SMOOTH	N/A	N/A	N/A	L23.240	N/A	L23.250
	4P. 2SG/2SP	WOODGRAIN	L23.202	L23.203	L23.212	L23.222	N/A	L23.232
		SMOOTH	N/A	N/A	N/A	L23.242	N/A	L23.252
쁘	4P. 4SP	WOODGRAIN	L23.204	L23.205	L23.214	L23.224	N/A	L23.234
YTS		SMOOTH	N/A	N/A	N/A	L23.244	N/A	L23.254
e l	<b>6F</b>	WOODGRAIN	L23.206	L23.207	L23.216	L23.226	N/A	L23.236
DOO	SE	SMOOTH	N/A	N/A	N/A	L23.246	N/A	L23.256
	SE 46.0	WOODGRAIN	L23.206A	L23.207A	L23.219	N/A	N/A	N/A
	SE.1SG	SMOOTH	N/A	N/A	N/A	N/A	N/A	N/A
Ī	00 000 000	WOODGRAIN	L23.208	L23.209	L23.218	L23.228	N/A	L23.238
1.5	6P. 2SG/4SP	SMOOTH	N/A	N/A	N/A	L23.248	N/A	L23.258

### TABLE OF COMPOSITE DOORS AND SPECIFICATION REFERENCES

				GL	AZING	
		1.1.1	DOOR	SIDE LIGHT	OVER LIGHT	SIDE & OVER LIGHTS
1		RPF	L23.310/312	N/A	N/A	N/A
	3P. 15G/25P	LEC	L23.340/342	N/A	N/A	N/A
(FD30)		PUR	L23.368/369	N/A	N/A	N/A
		RPF	L23.322/324	N/A	N/A	N/A
	4P. 2SG/2SP	LEC	L23.352/354	N/A	L23.361	N/A
		PUR	L23.370/371	L23.376/377	L23.372/373/374/375	L23.378/379/380/381
DOORS	1.00	RPF	L 23. 320	N/A	N/A	N/A
	4P. 45P	LEC	L 23. 350	N/A	N/A	N/A
FIRE		PUR	L 23. 364	N/A	N/A	N/A
mIn.		RPF	L 23. 330	N/A	N/A	N/A
8	6P. 6SP	LEC	N/A	N/A	N/A	N/A
		PUR	L 23. 365	N/A	N/A	N/A
		RPF	N/A	N/A	N/A	N/A
	6P. 2SG/4SP	LEC	L 23. 360	L23.362	N/A	L23.363
		PUR	L23.366/367	N/A	N/A	N/A

<u>KEY:</u> P = Panels per Door = Safety Glazing = Solid Panel

 SP
 = Solid Panel

 SE
 = Sheeted Effect

 RPF
 = Rigid Phenolic Foam

 LEC
 = Lumber Engineered Core

 PUR
 = Polyurethane Core

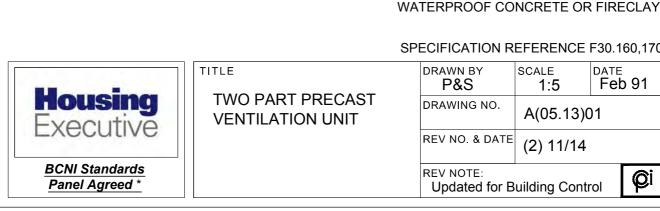
TABLE OF COMPOSITE FIRE DOORS AND SPECIFICATION REFERENCES



	drawn by CgR/CB	scale 1:50	DATE Nov 06
EXTERNAL ENTRANCE Schedule of factory	DRAWING NO.	S(05.11)	06
pre-finished external door-set types	REV NO. & DATE	(2) 02/17	
COMPOSITE	REV NOTE: New style	added	Øi

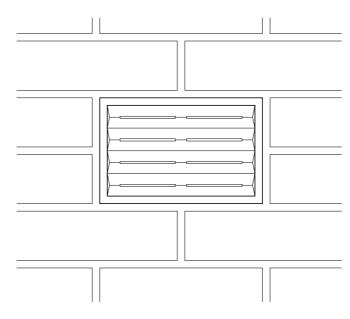
DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION © NIHE 2017





outside inside Install DPC above vent if wall is newly constructed F30.480, 485 or 510 Precast vent unit C(05.13)01 Weep hole

SECTION



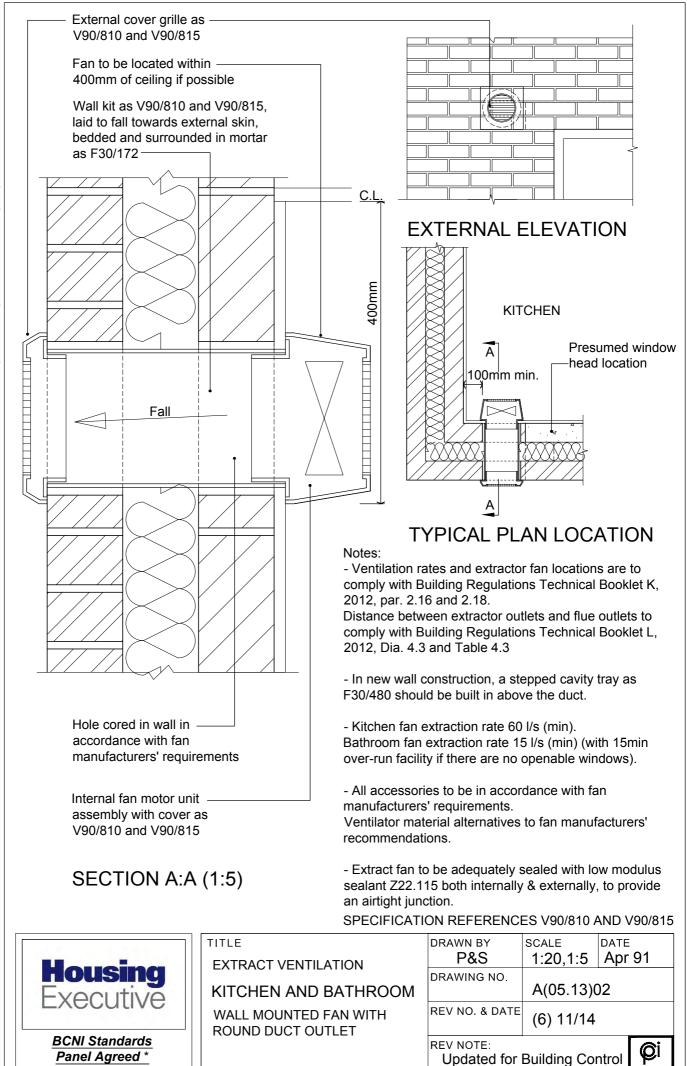
**ELEVATION** 

NB: CAVITY BOX TO BE NON ABSORBENT WATERPROOF CONCRETE OR FIRECLAY

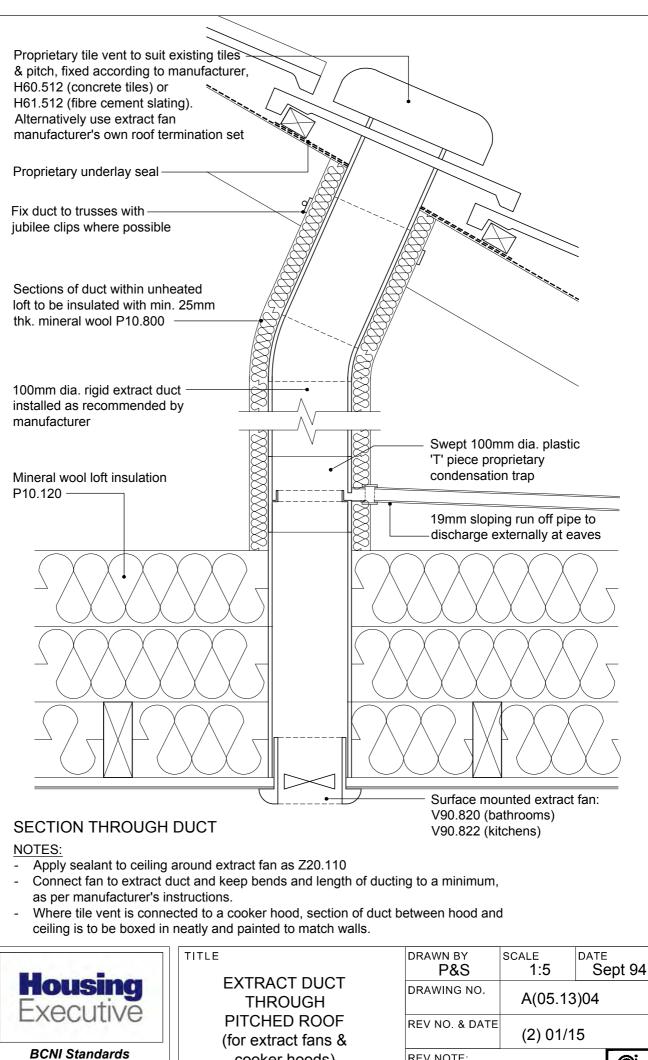
SPECIFICATION REFERENCE F30.160,170

There is no legal obligation for any Building Control department to adopt this recommendation & it is subject to revision in the event of changes to the legislation or other mitigating circumstances. This NIHE produced detail has been examined by The Building Control N.I. Standards Panel and has been considered reasonable in it's interpretation of the relevant requirements of the Building Regulation NI 2012.

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DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION



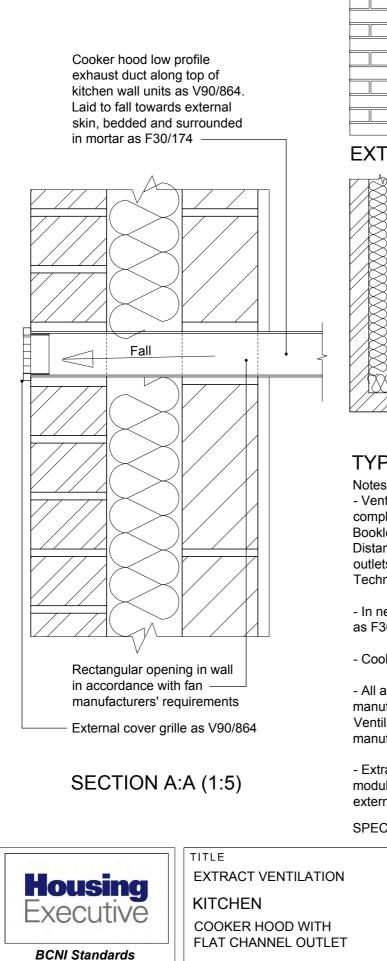
cooker hoods)

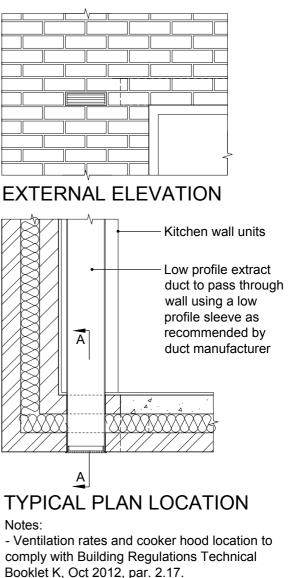
DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION

Panel Agreed '

REV NOTE: Updated to revised spec

Qi





Distance between extractor outlets and flue outlets to comply with Building Regulations Technical Booklet L, 2012, Dia. 4.3 and Table 4.3

- In new wall construction, a stepped cavity tray as F30/480 should be built in above the duct.

- Cooker hood extraction rate 30 l/s (min).

- All accessories to be in accordance with fan manufacturers' requirements. Ventilator material alternatives to fan manufacturers' recommendations.

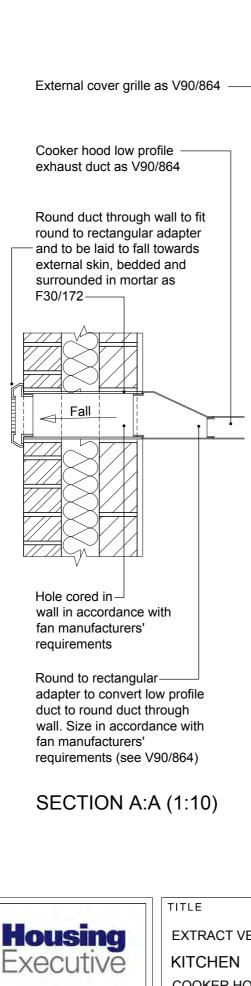
- Extract duct to be adequately sealed with low modulus sealant Z22.115 both internally & externally, to provide an airtight junction.

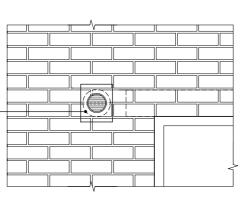
### SPECIFICATION REFERENCES V90/864

	DRAWN BY	SCALE	DATE	
N	P&S	1:20, 1:5	No	/. 12
	DRAWING NO.			
		A(05.13)06		
	REV NO. & DATE			
ΞT		(1) 11/14		
	REV NOTE: Updated for Building Control			<b>p</b> i
	•			

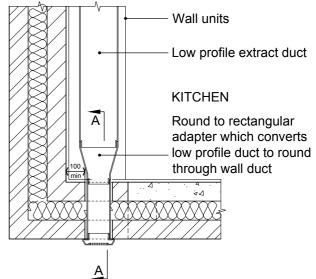
© NIHE 2017 DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION

Panel Agreed '





### EXTERNAL ELEVATION



## TYPICAL PLAN LOCATION

Notes:

- Ventilation rates and cooker hood location to comply with Building Regulations Technical Booklet K, Oct 2012, par. 2.17. Distance between extractor outlets and flue outlets

to comply with Building Regulations Technical Booklet L, 2012, Dia. 4.3 and Table 4.3

- In new wall construction, a stepped cavity tray as F30/480 should be built in above the duct.

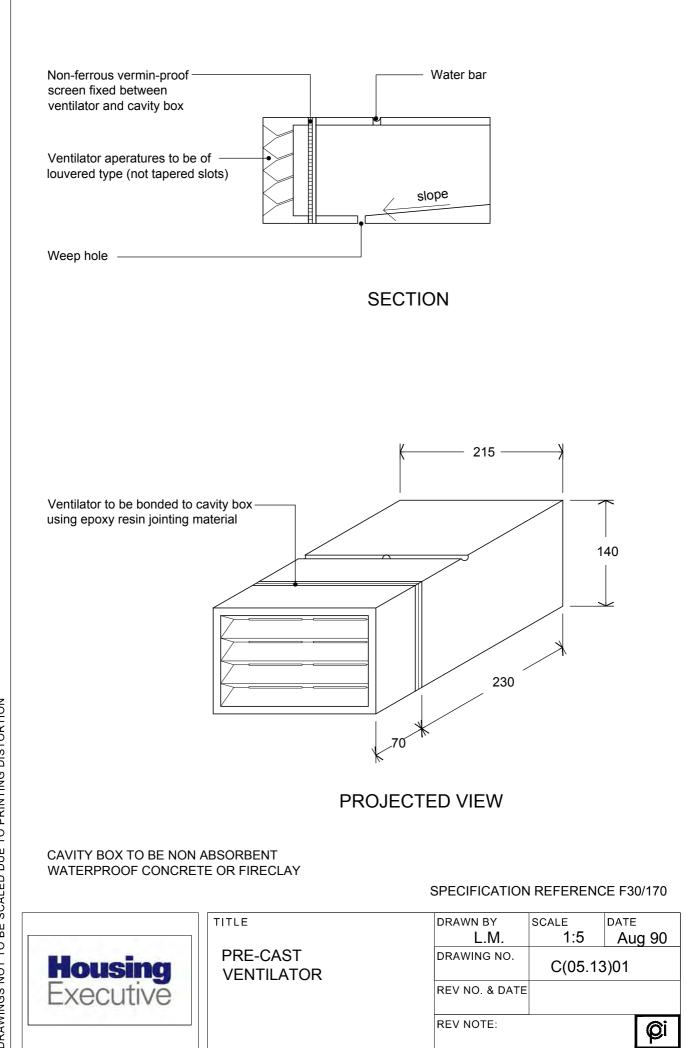
- Cooker hood extraction rate 30 l/s (min).

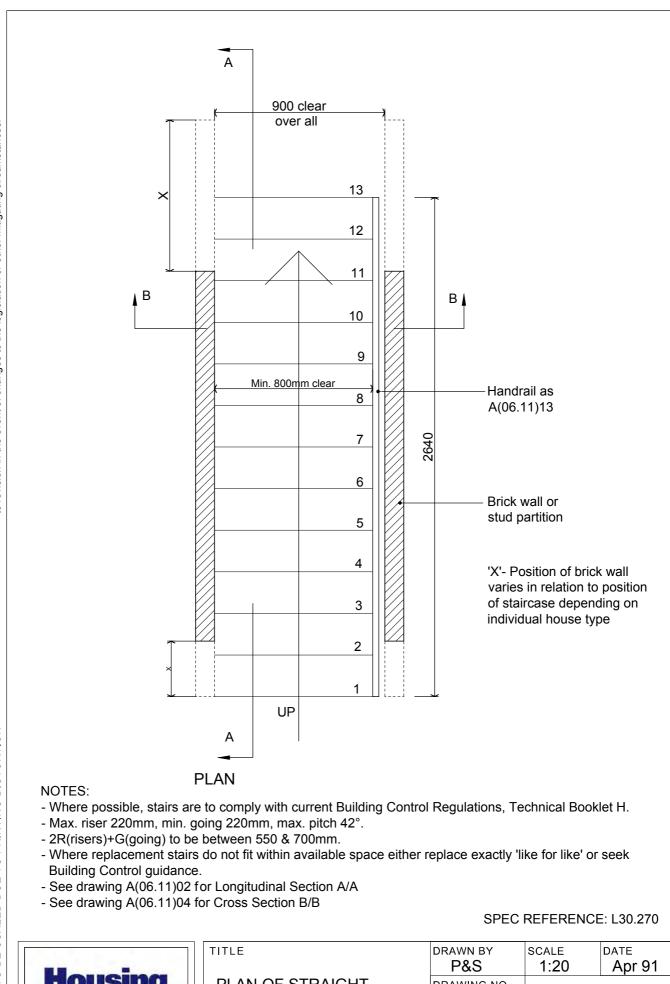
- All accessories to be in accordance with fan manufacturers' requirements. Ventilator material alternatives to fan manufacturers' recommendations.

- Extract duct to be adequately sealed with low modulus sealant Z22.115 both internally & externally, to provide an airtight junction.

### SPECIFICATION REFERENCES V90/864

	TITLE	drawn by CB	SCALE [ 1:20,1:10	DATE Nov	12
Housing Executive	EXTRACT VENTILATION KITCHEN COOKER HOOD WITH ROUND DUCT OUTLET	DRAWING NO. A(05.13)07			
		REV NO. & DATE (1) 11/14			
BCNI Standards Panel Agreed *		REV NOTE: Updated for Building Control			<b>p</b> i

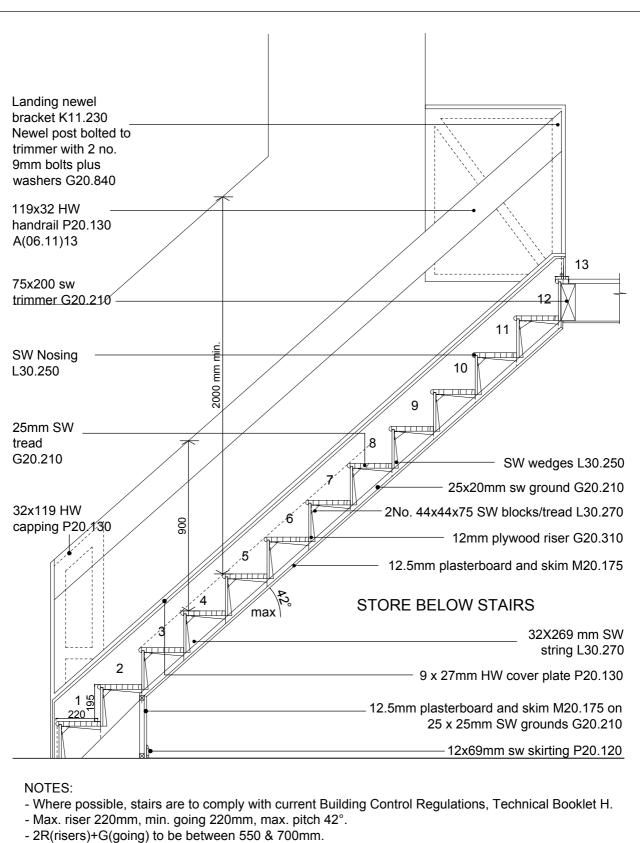




	TITLE	DRAWN BY	SCALE 1:20	DATE Apr 91
<b>Housing</b> Executive	PLAN OF STRAIGHT FLIGHT, TIMBER STAIR TO EXISTING DWELLINGS	DRAWING NO.	A(06.11)01	
		REV NO. & DATE		
BCNI Standards Panel Agreed *		REV NOTE: Updated for Building Control		ntrol <b>©i</b>

DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION

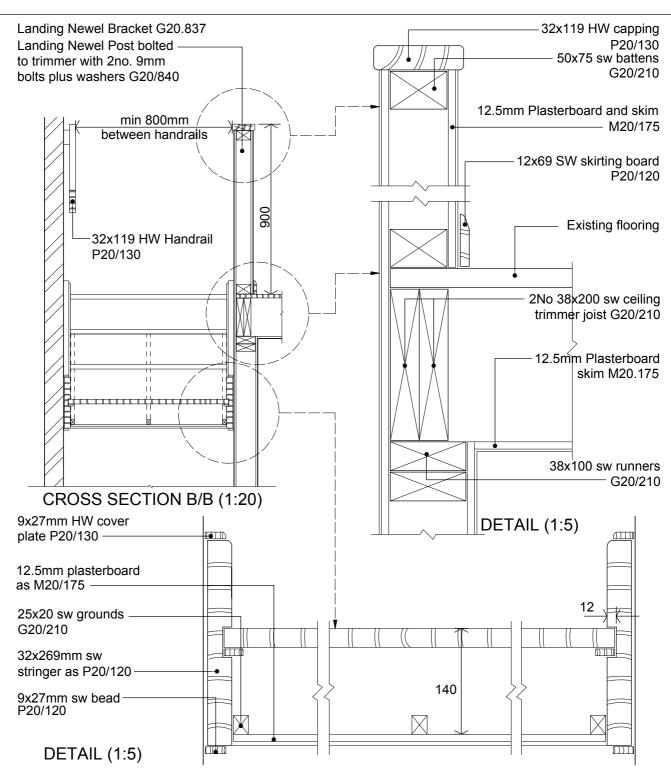
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- Where replacement stairs do not fit within available space either replace exactly 'like for like' or seek Building Control guidance.
- See drawing A(06.11)02 for Longitudinal Section A/A.
- See drawing A(06.11)04 for Cross Section B/B.
- Handrail to be able to resist 0.36kN/m of horizontal force.

<b>Housing</b> Executive	FLIGHT STAIRCASE WITHIN EXISTING DWELLINGS	drawn by <b>P&amp;S</b>	SCALE 1:20	date Apr 91
		DRAWING NO. A(06.11)02 REV NO. & DATE (6) 07/16		)2
BCNI Standards Panel Agreed *		REV NOTE: Updated for E		ntrol <b>©i</b>

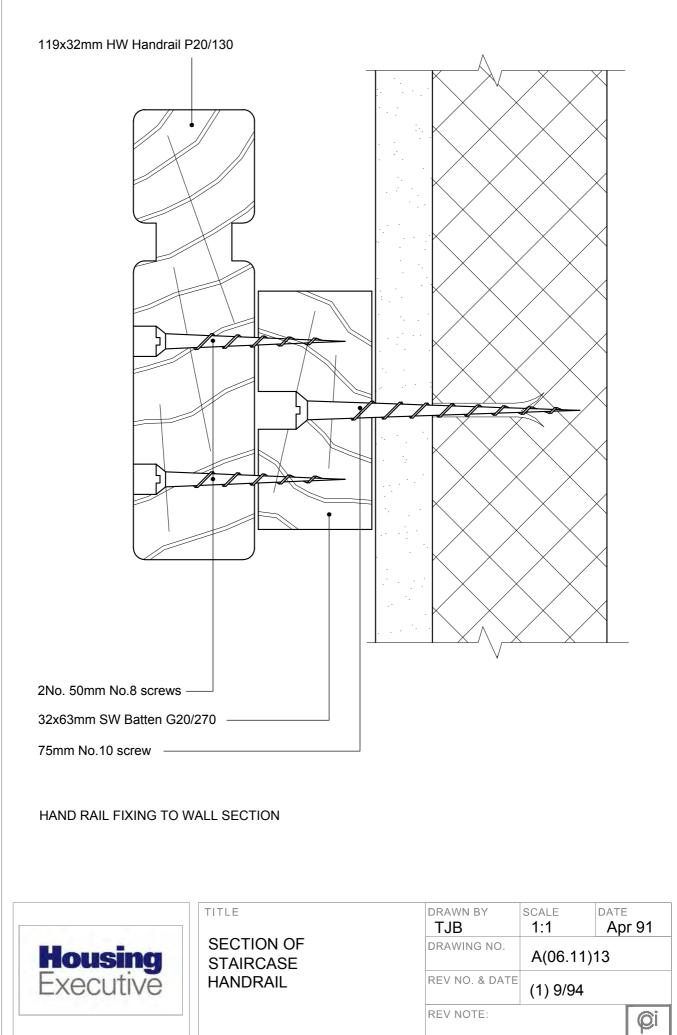
SPEC REFERENCE: L30.270

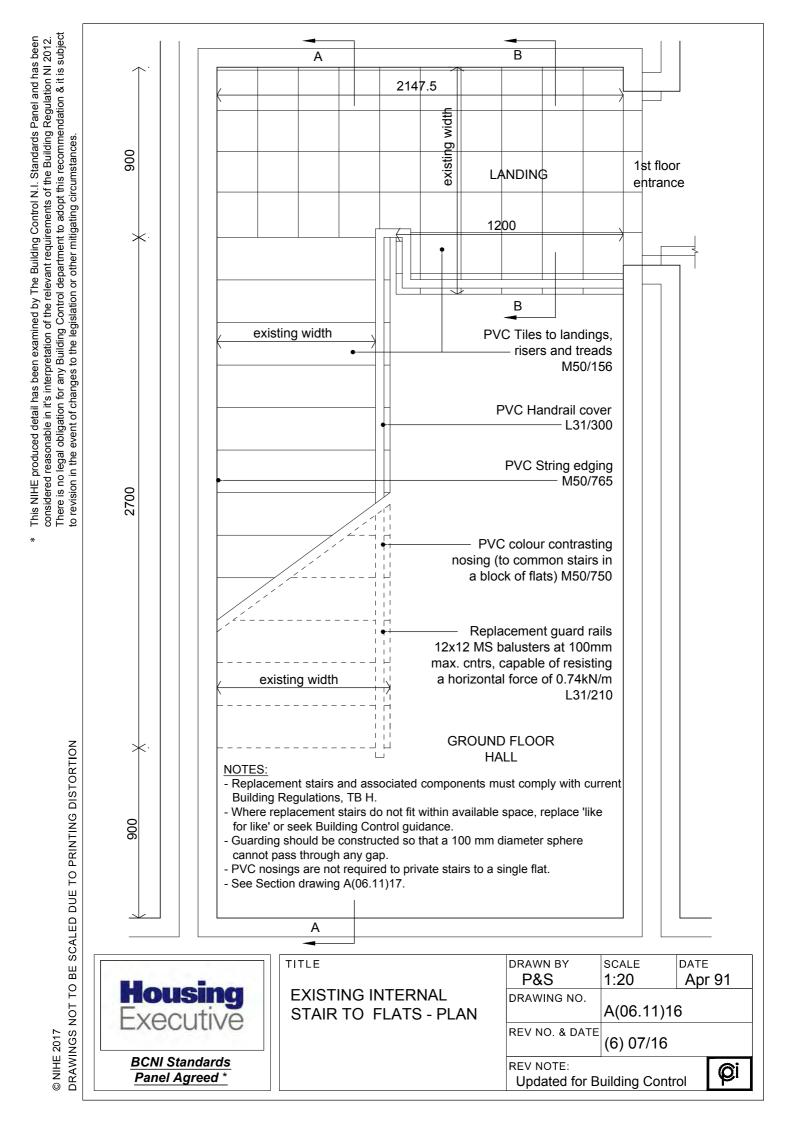


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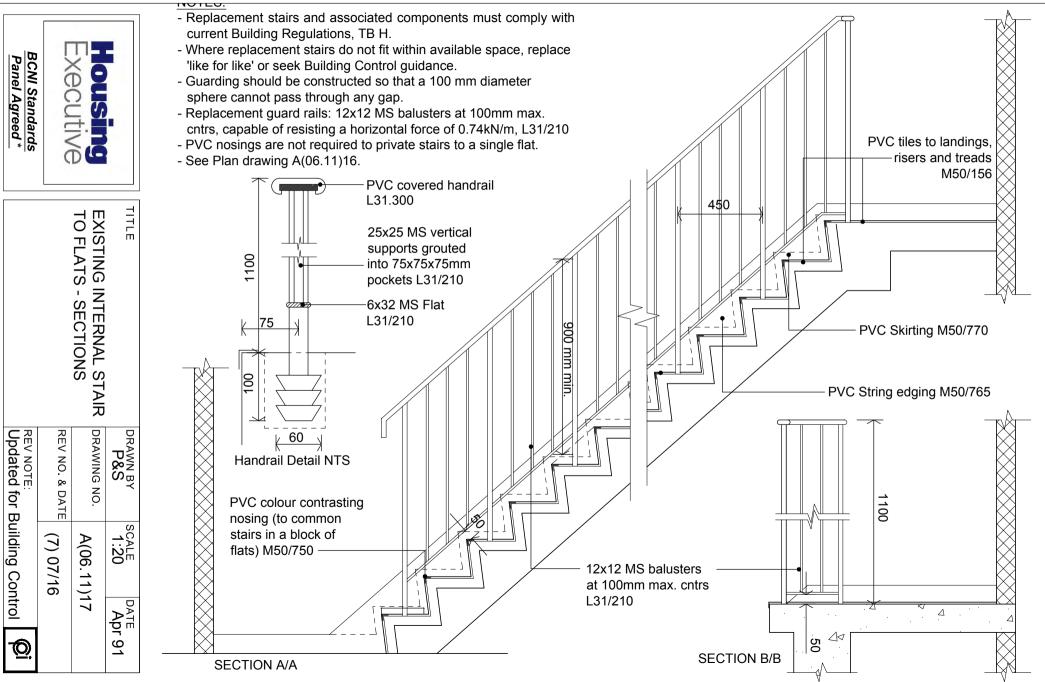
- Where possible, stairs are to comply with current Building Control Regulations, Technical Booklet H.
- Max. riser 220mm, min. going 220mm, max. pitch 42°.
- 2R(risers)+G(going) to be between 550 & 700mm.
- Where replacement stairs do not fit within available space either replace exactly 'like for like' or seek Building Control guidance.
- See drawing A(06.11)01 for Stair Plan & drawing A(06.11)02 for longitudinal cross section A-A
- Guarding rails to resist a horizontal force of 0.36kN/m.
- Guarding should be constructed so that a 100 mm diameter sphere cannot pass through any opening in it.

SCA				Spec Reference	e L30.270	
NOT TO BE		STAIRCASE WITHIN EXISTING			DATE Apr 91	
	Housing Executive		DRAWING NO.	A(06.11)04		
			REV NO. & DATE	(6) 07/16		
DRAWINGS	BCNI Standards Panel Agreed *			for Building Control		

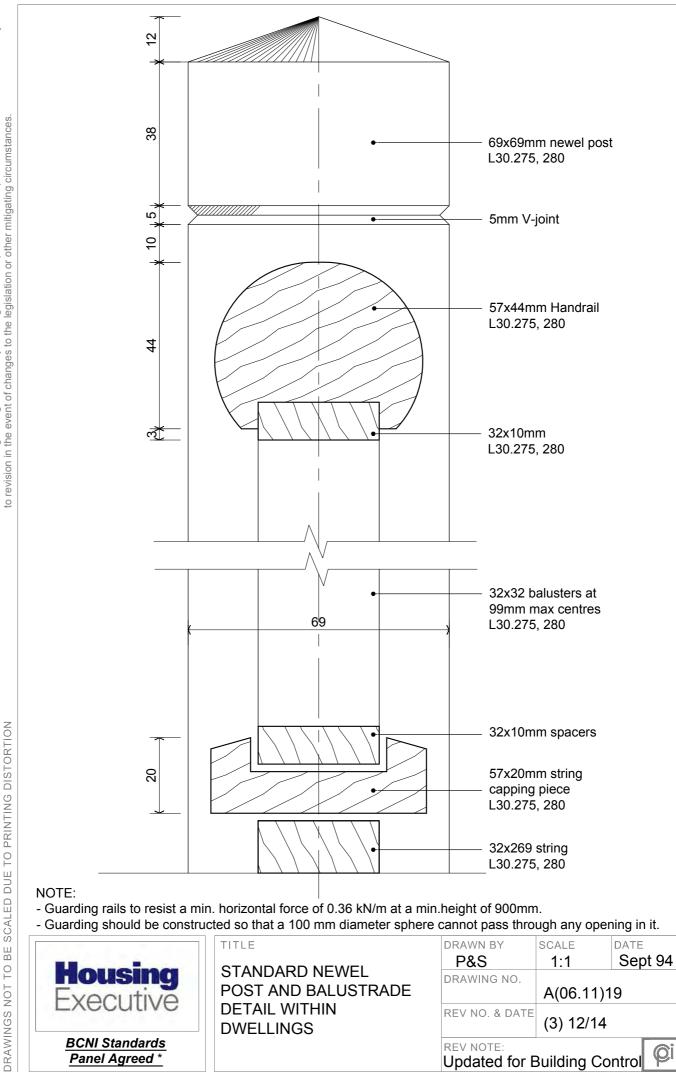


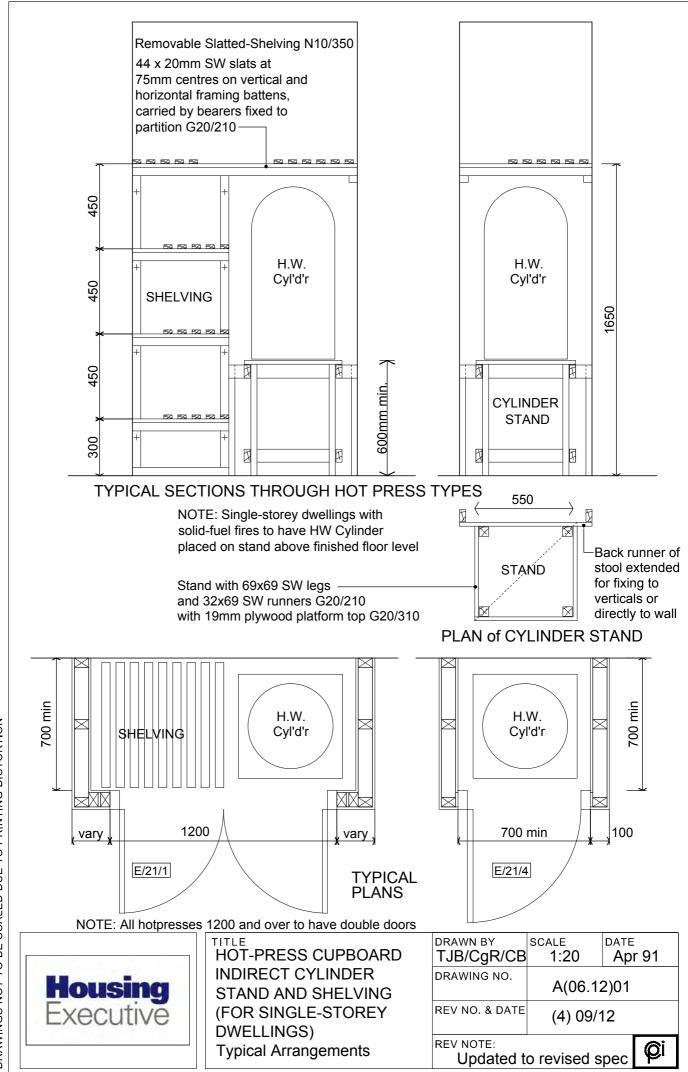


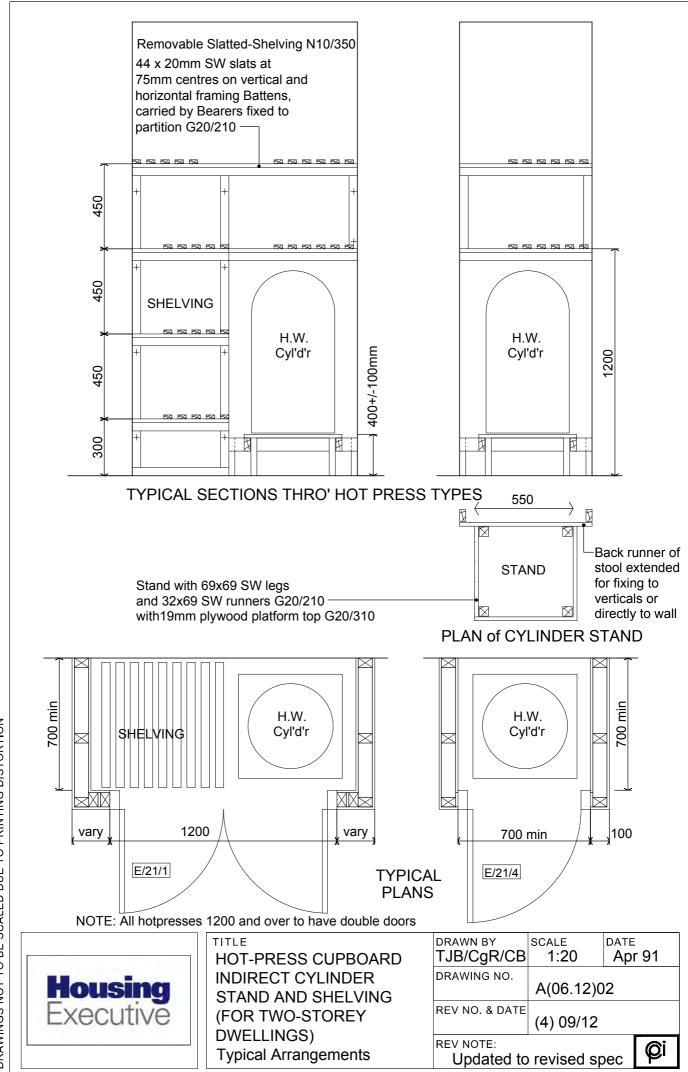
\* This NIHE produced detail has been examined by The Building Control N.I. Standards Panel and has been considered reasonable in it's interpretation of the relevant requirements of the Building Regulation NI 2012. There is no legal obligation for any Building Control department to adopt this recommendation & it is subject to revision in the event of changes to the legislation or other mitigating circumstances.



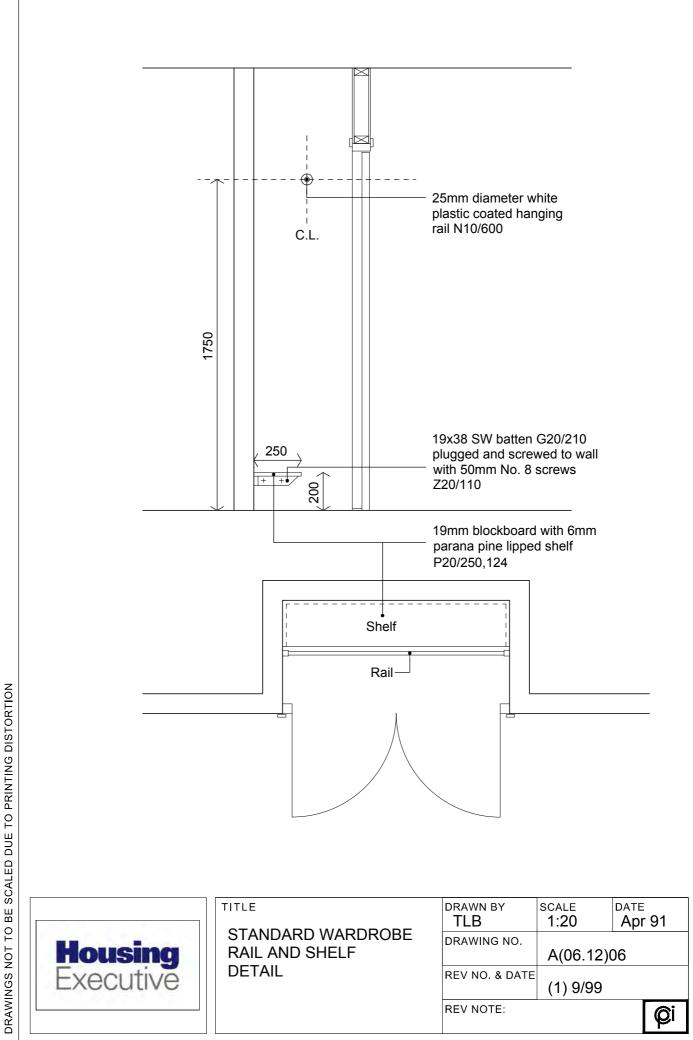
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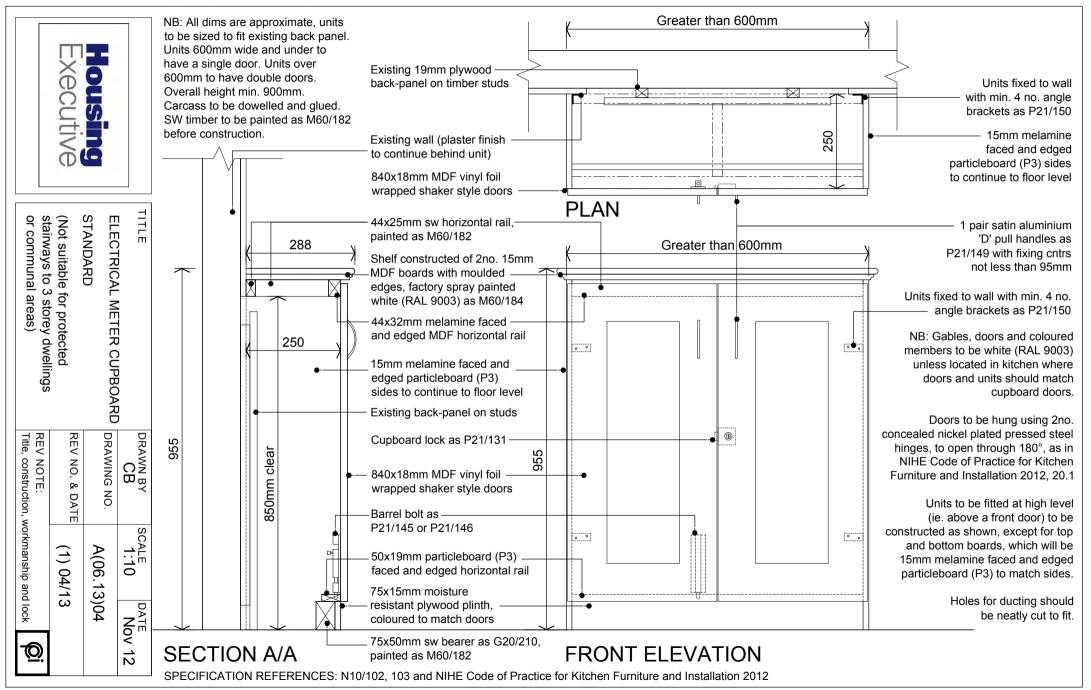


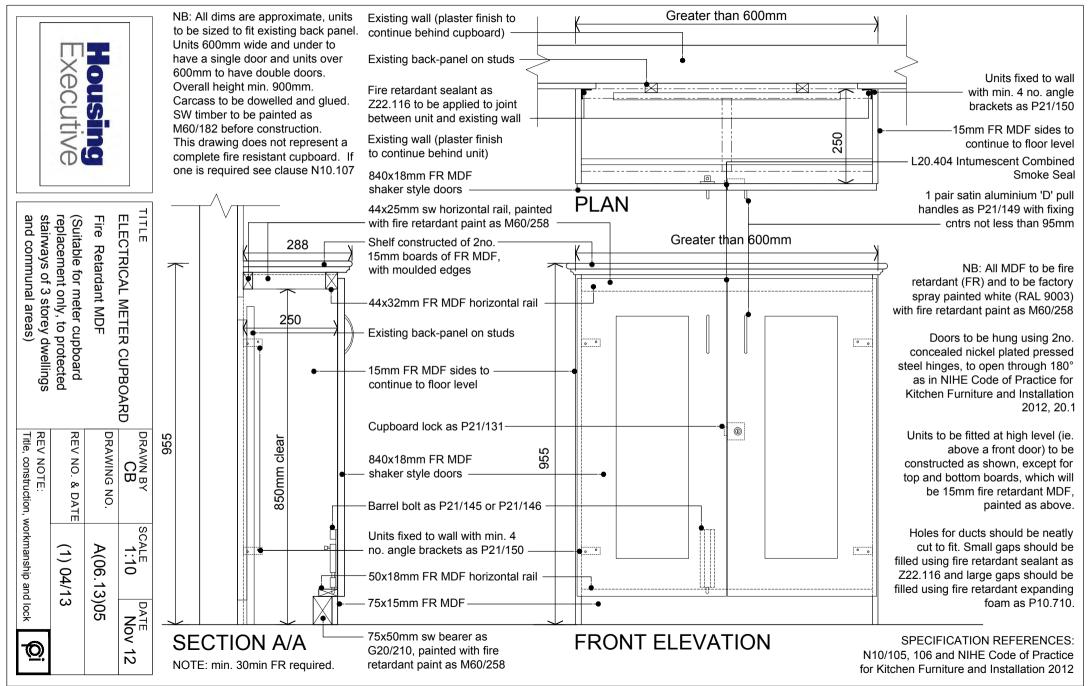


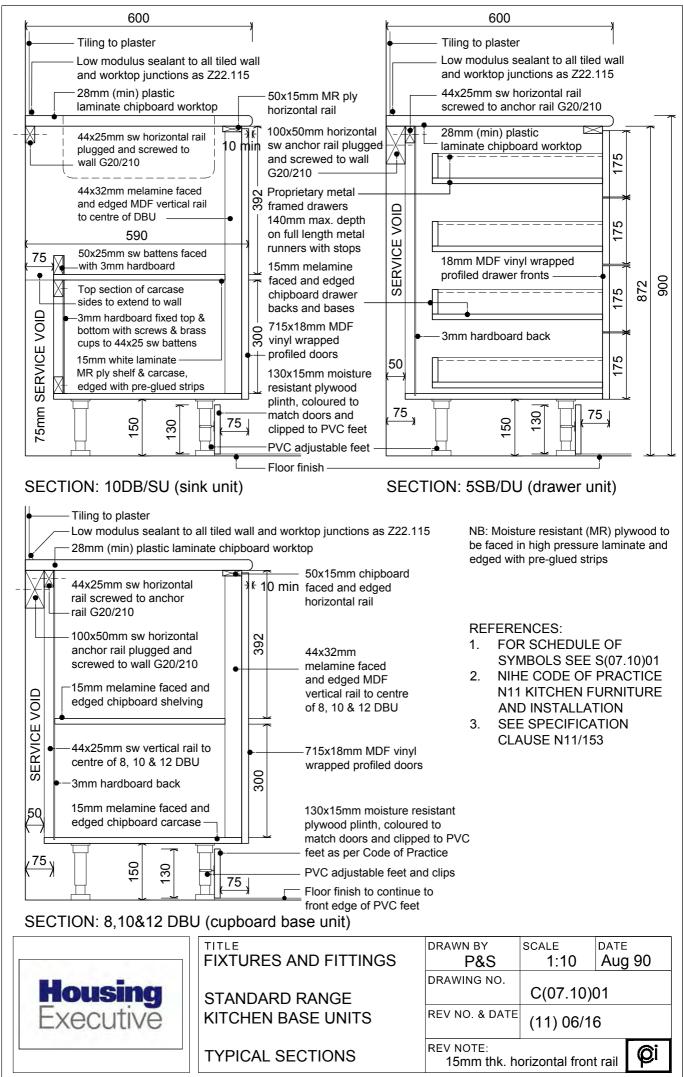
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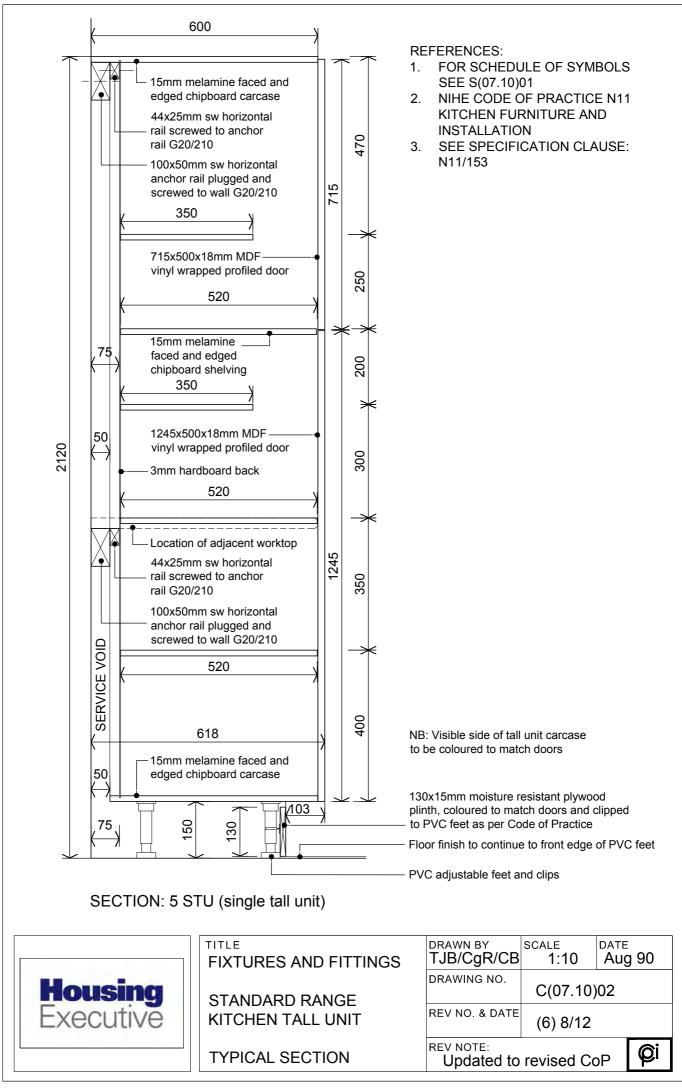
© NIHE 2017 DRAWINGS NOT TO BE

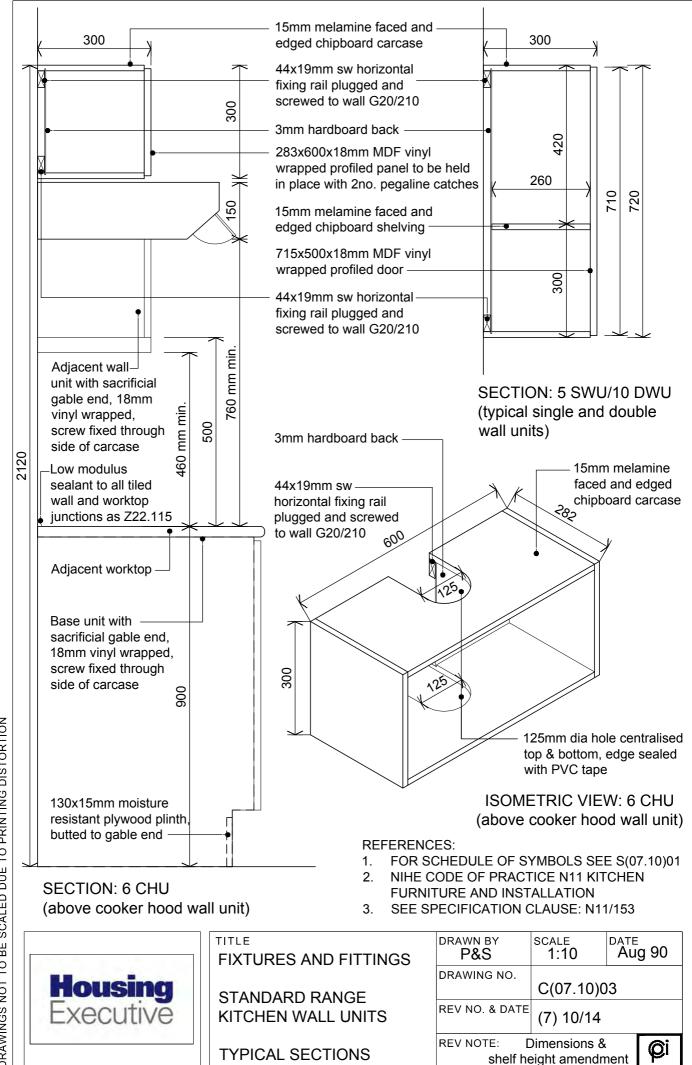


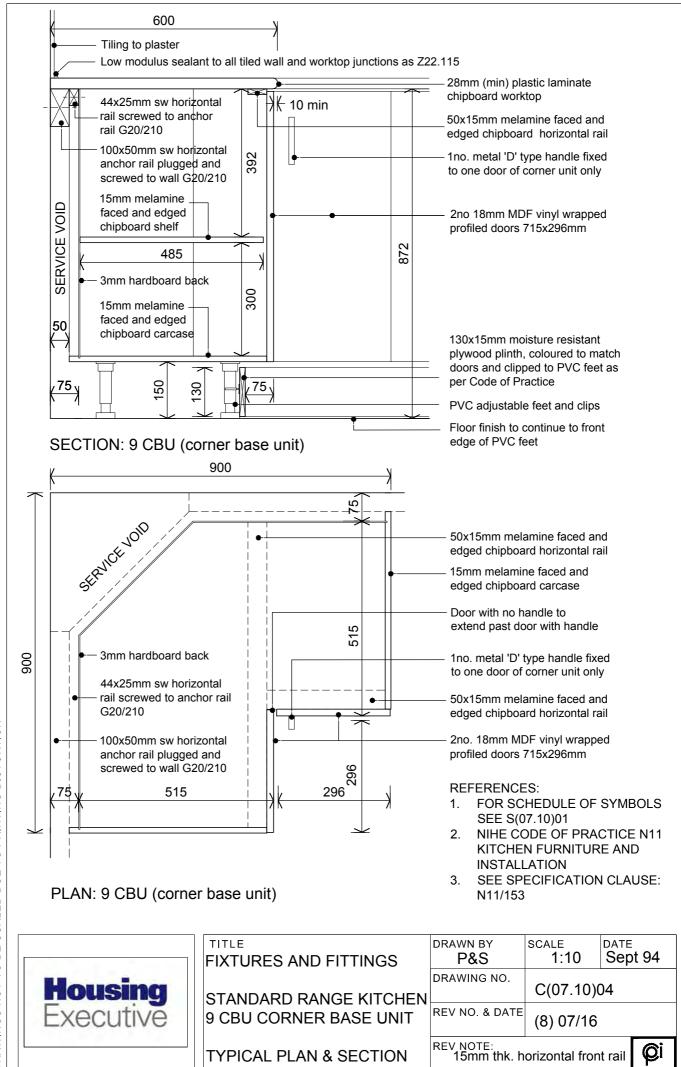




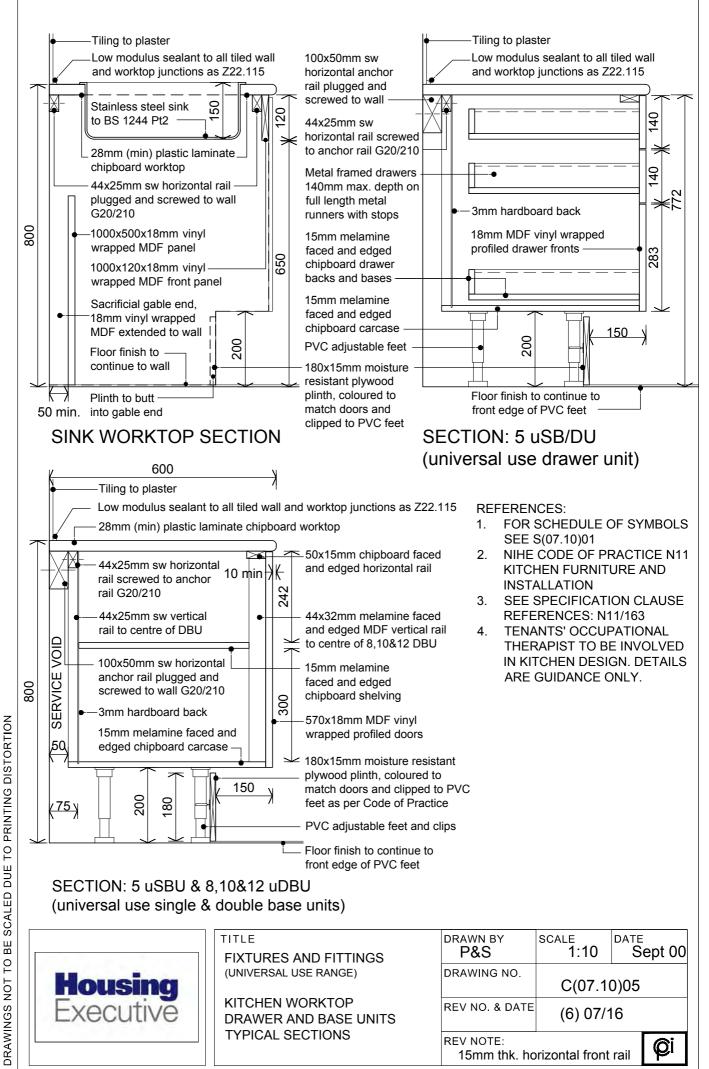
DUE TO PRINTING DISTORTION SCALED **DRAWINGS NOT TO BE** 



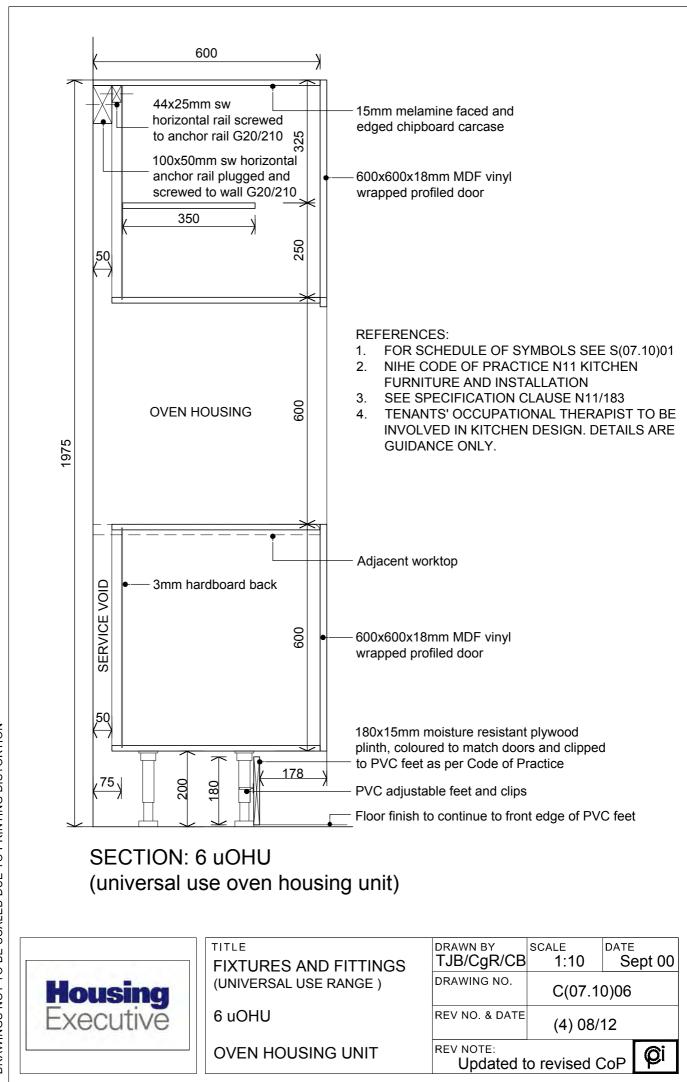


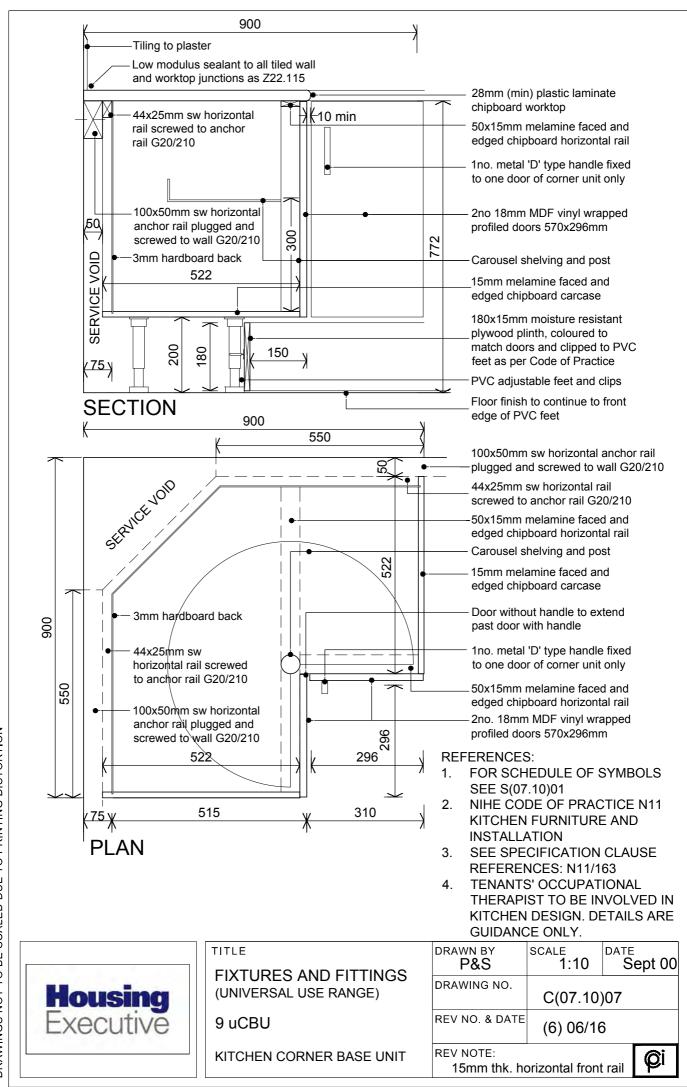


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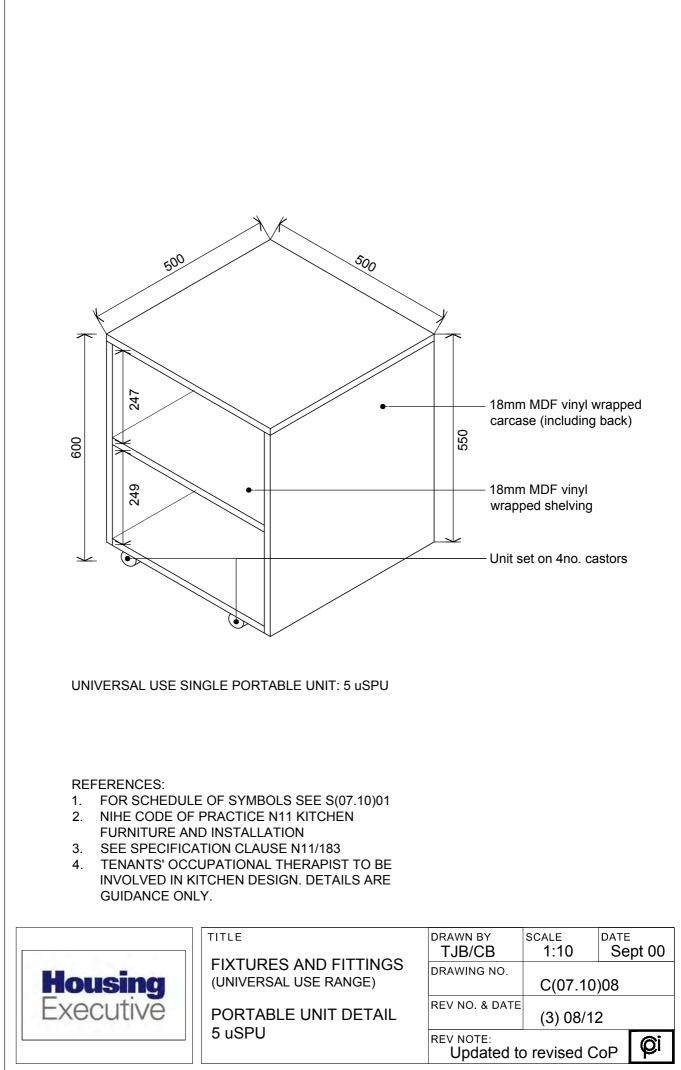


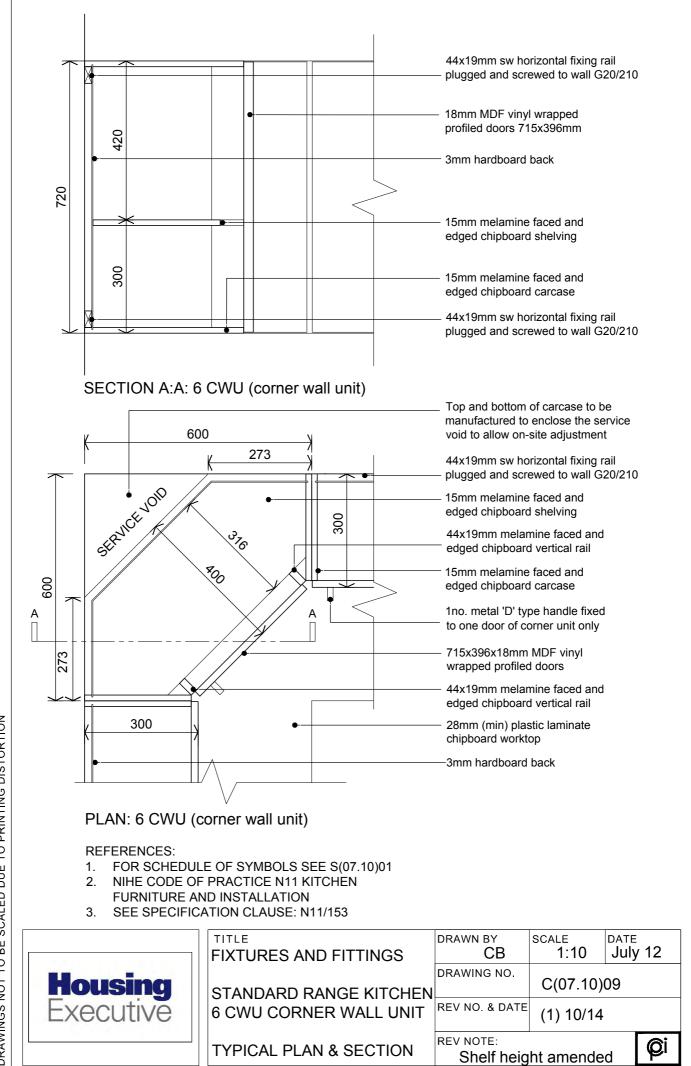
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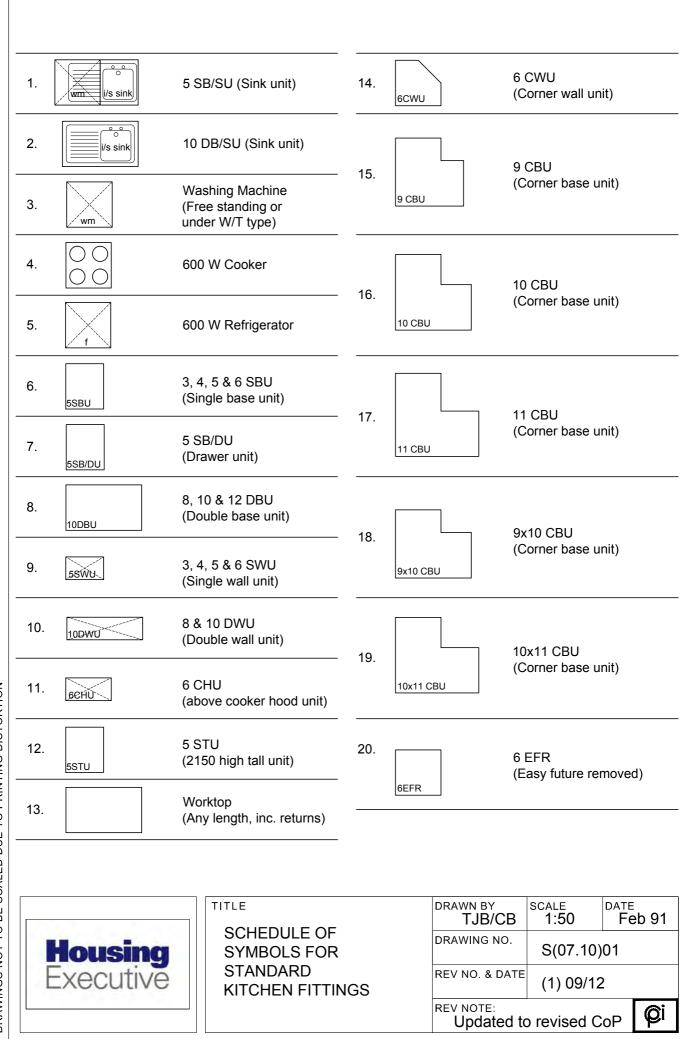


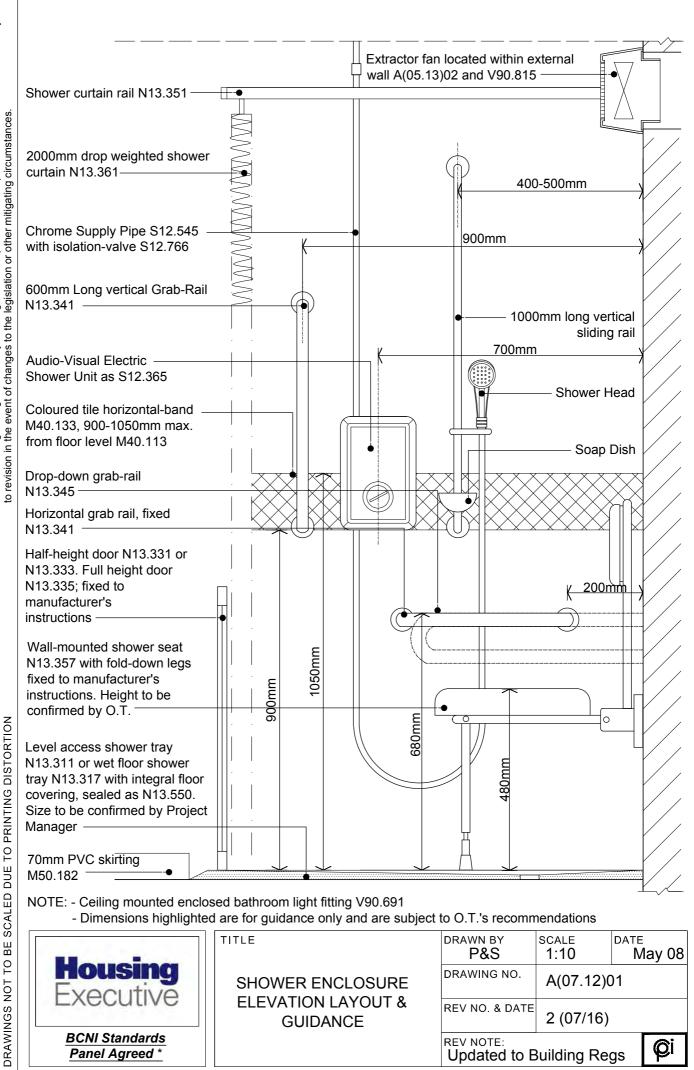


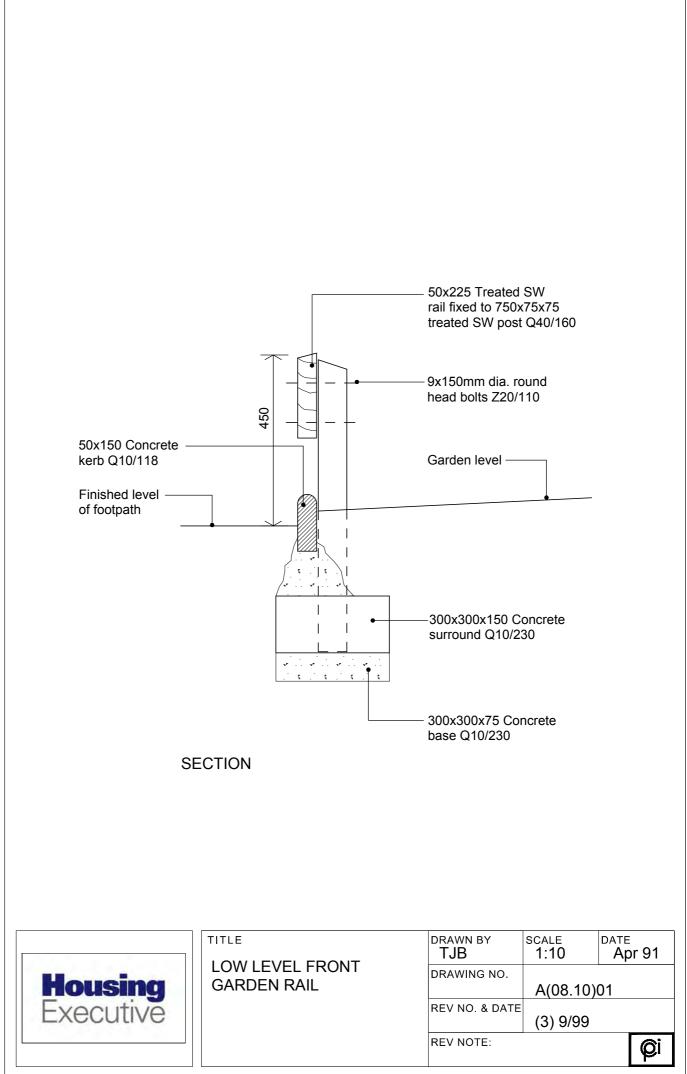
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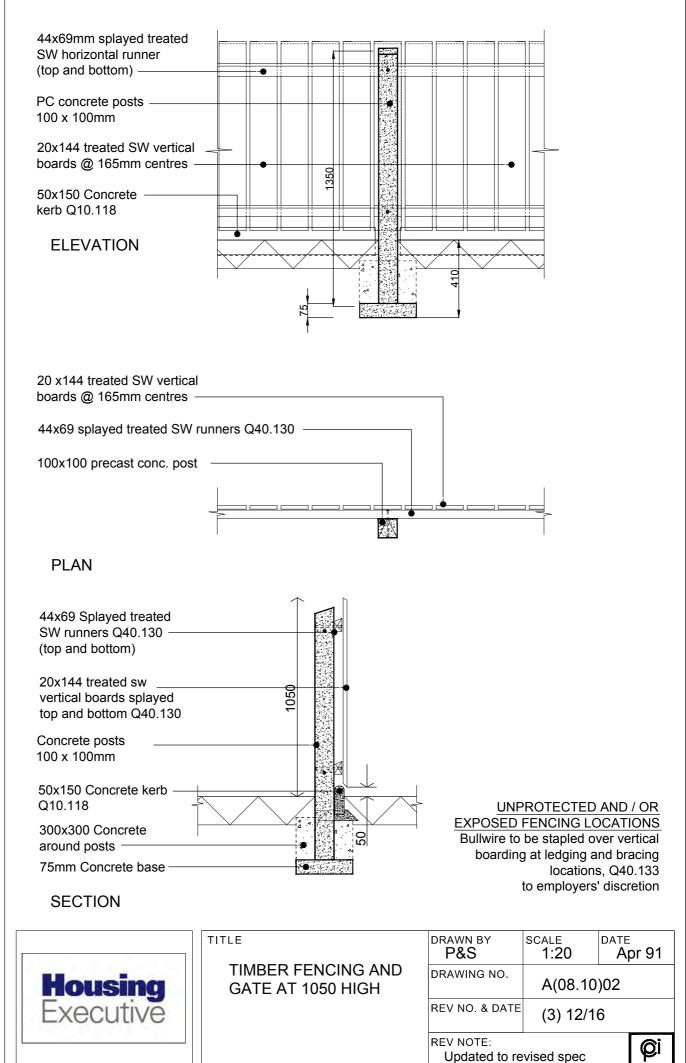


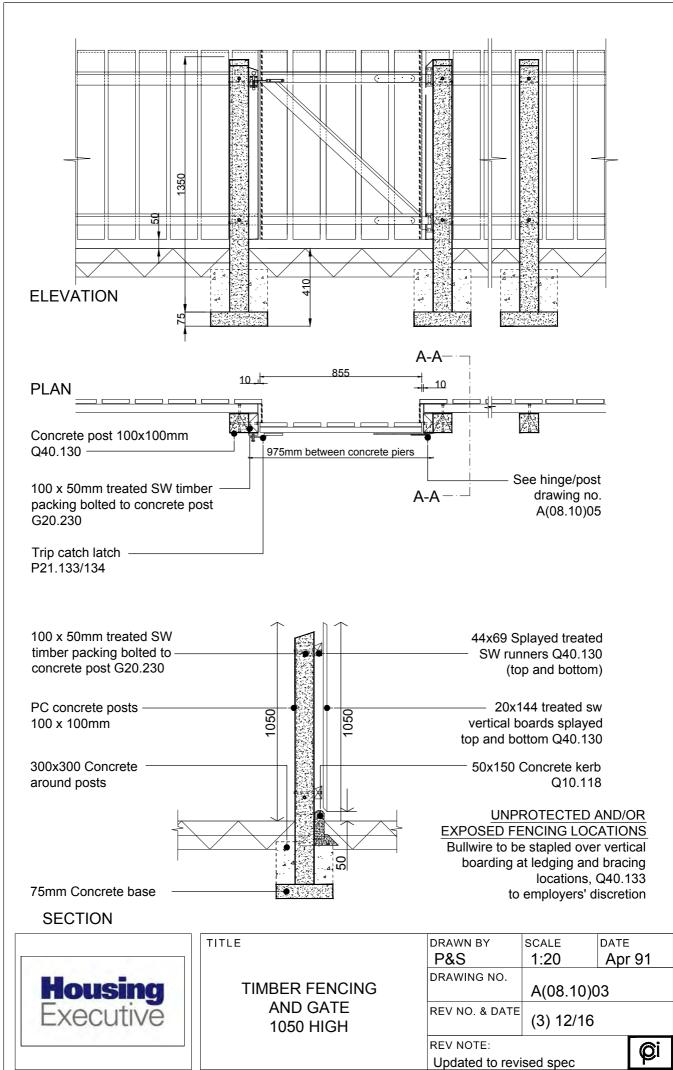


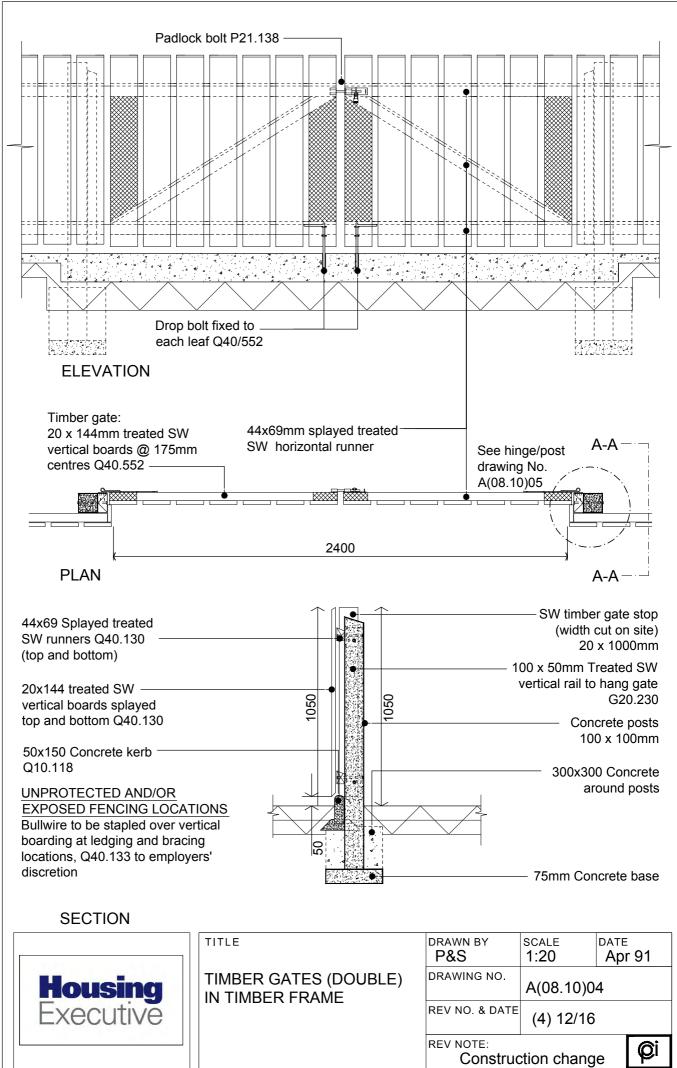


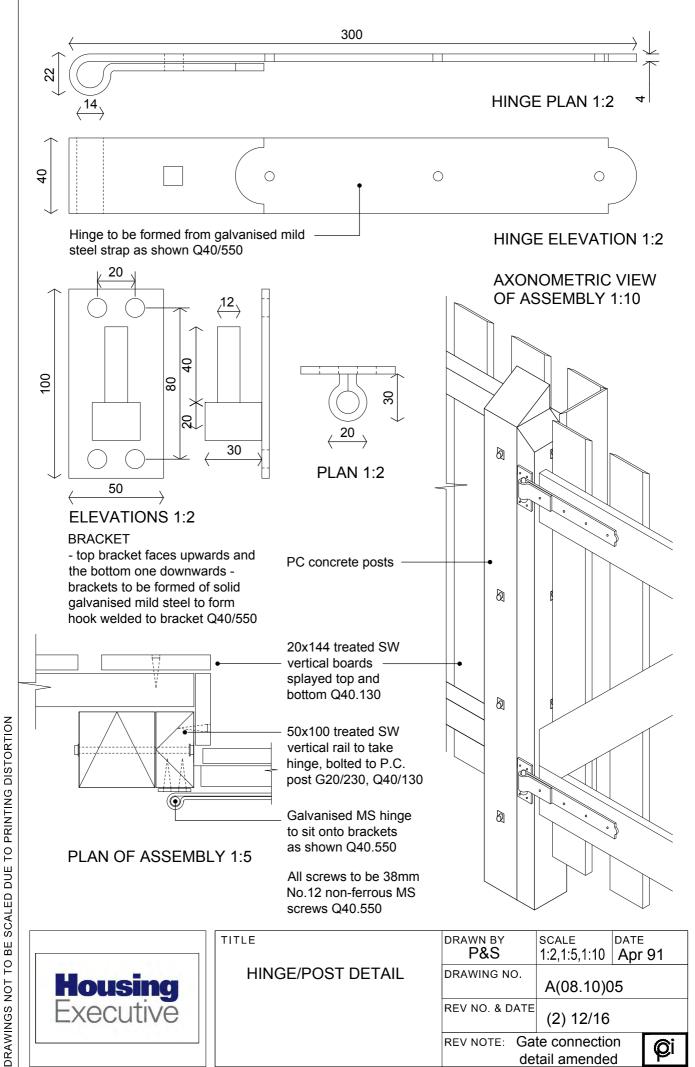




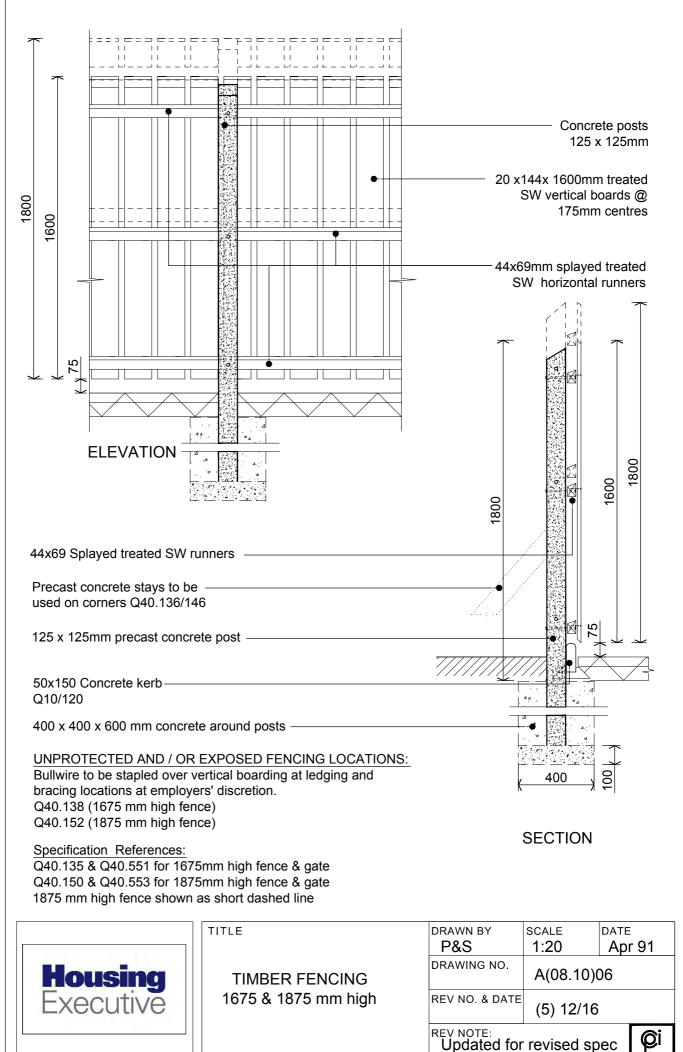


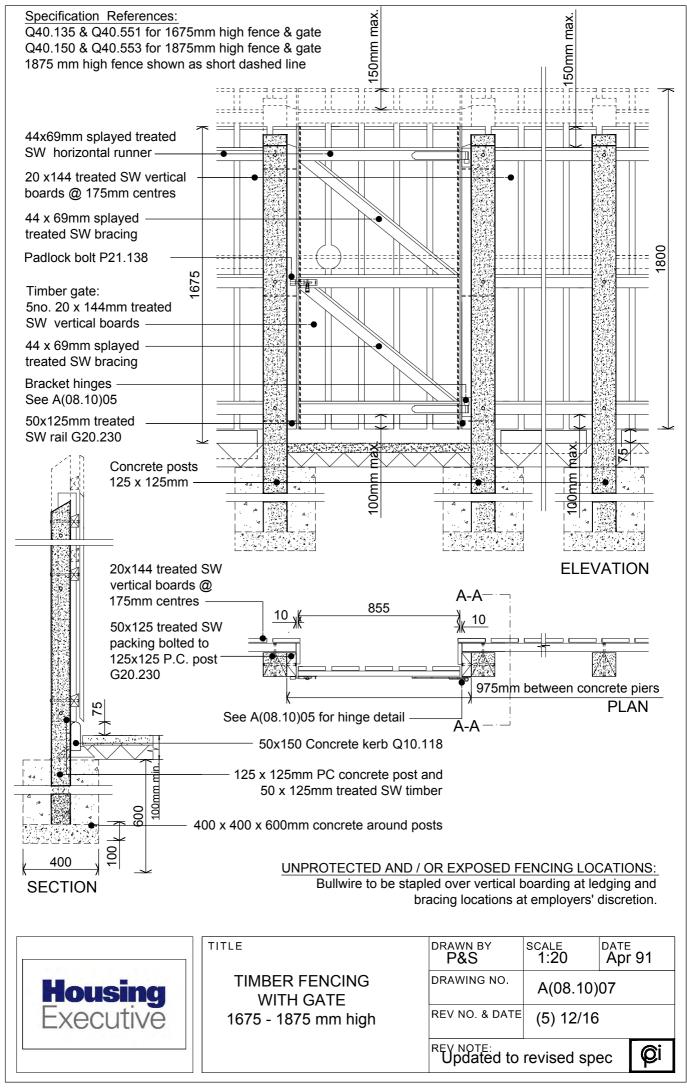




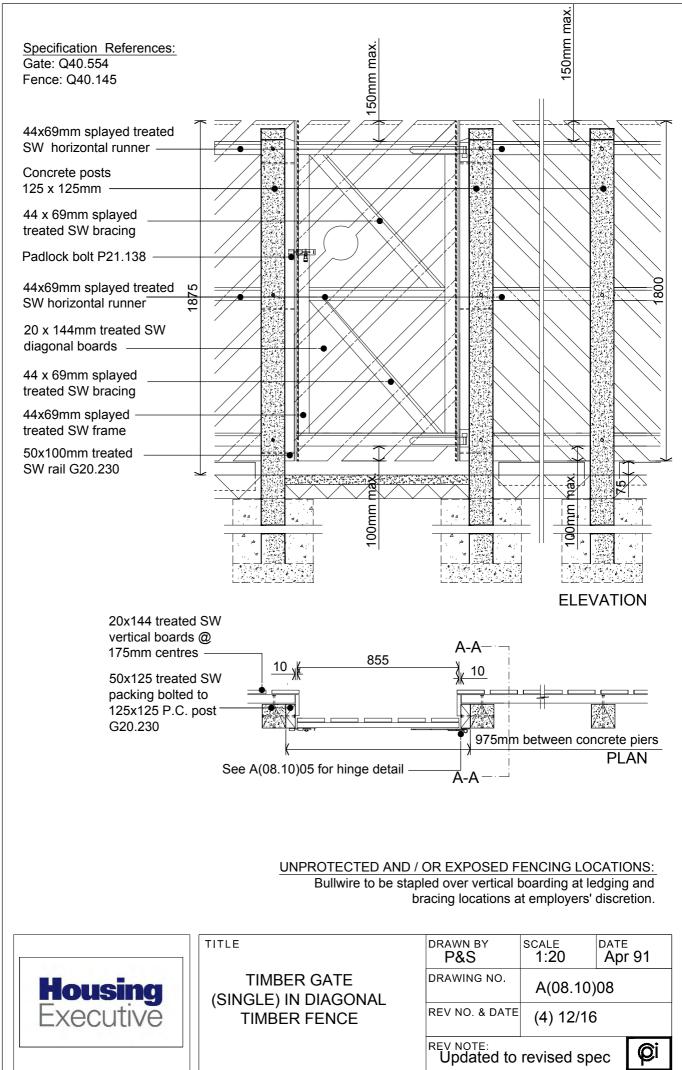


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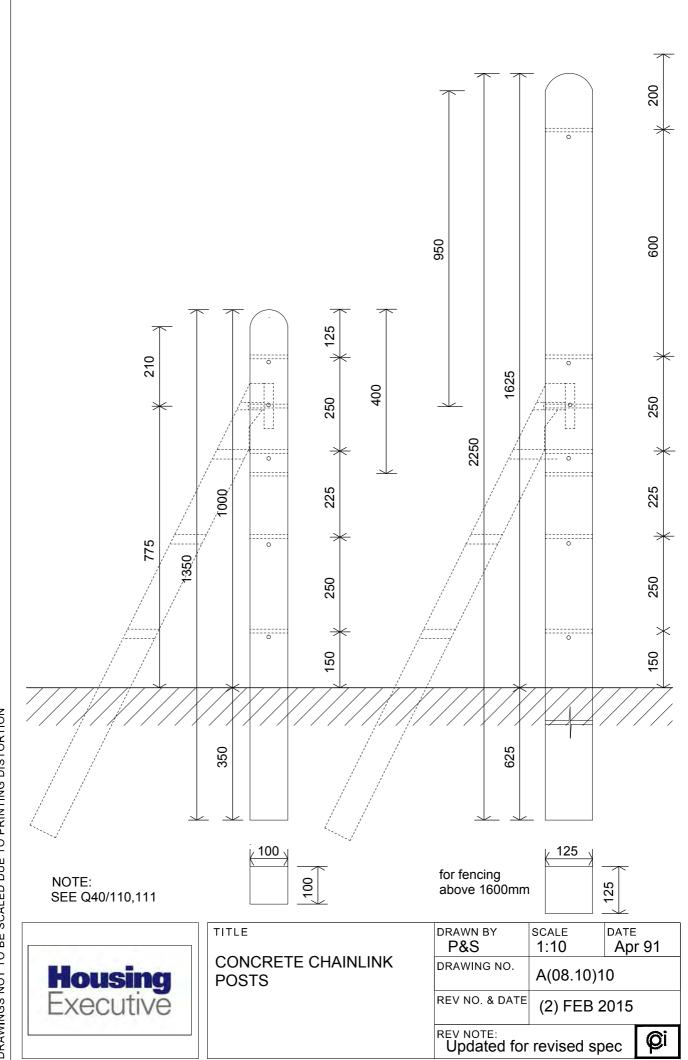


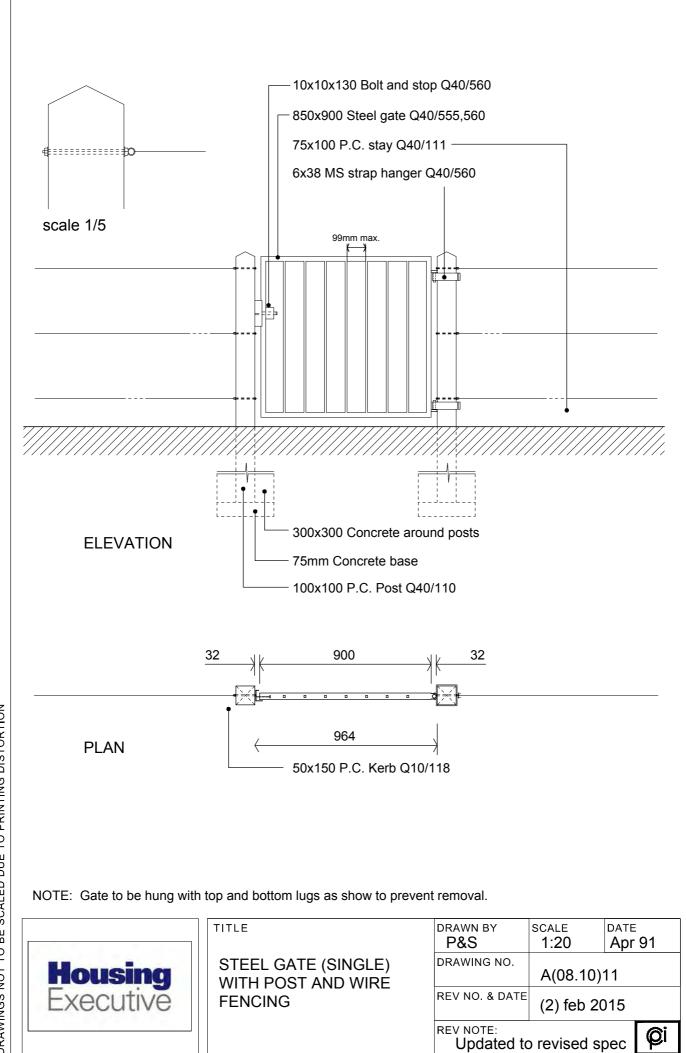


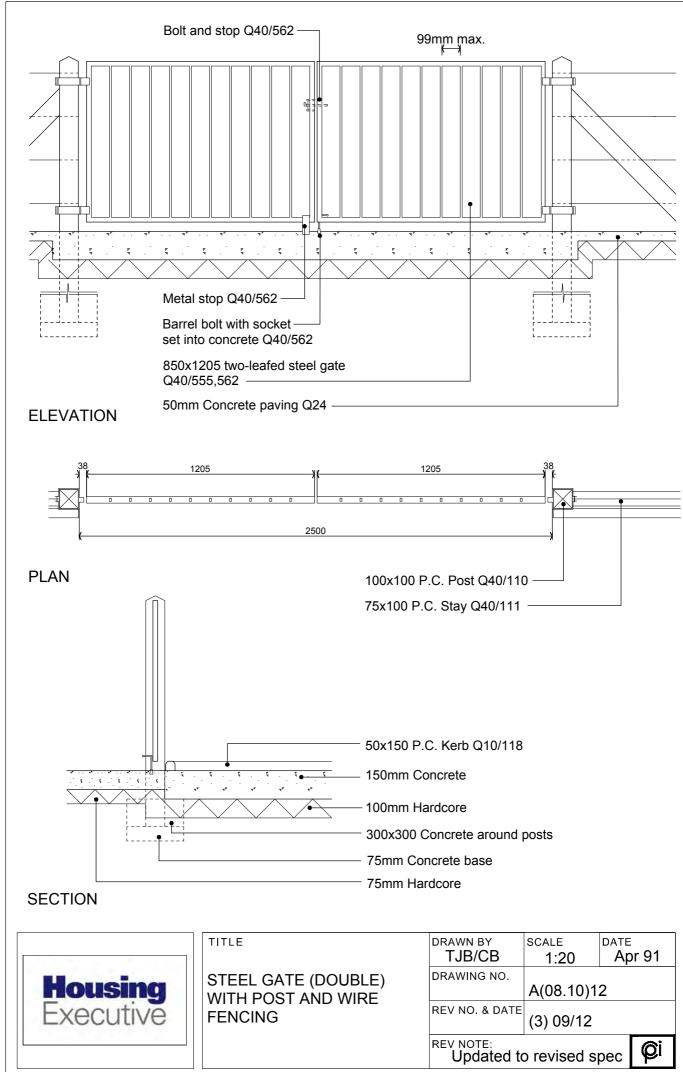
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SCALED DUE TO PRINTING DISTORTION DRAWINGS NOT TO BE

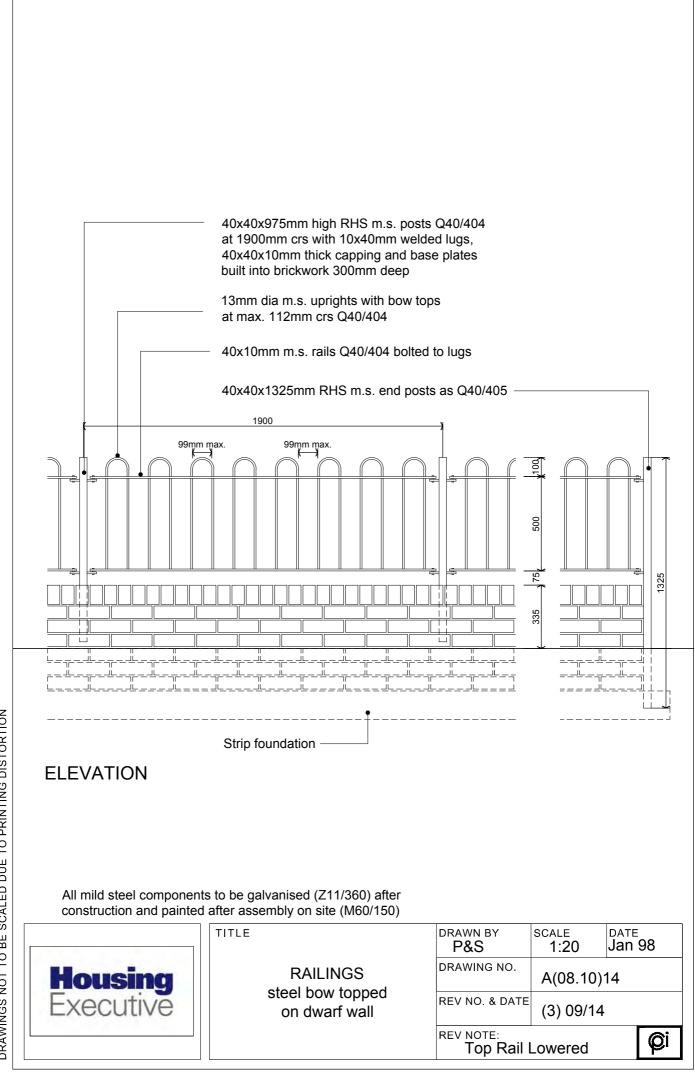


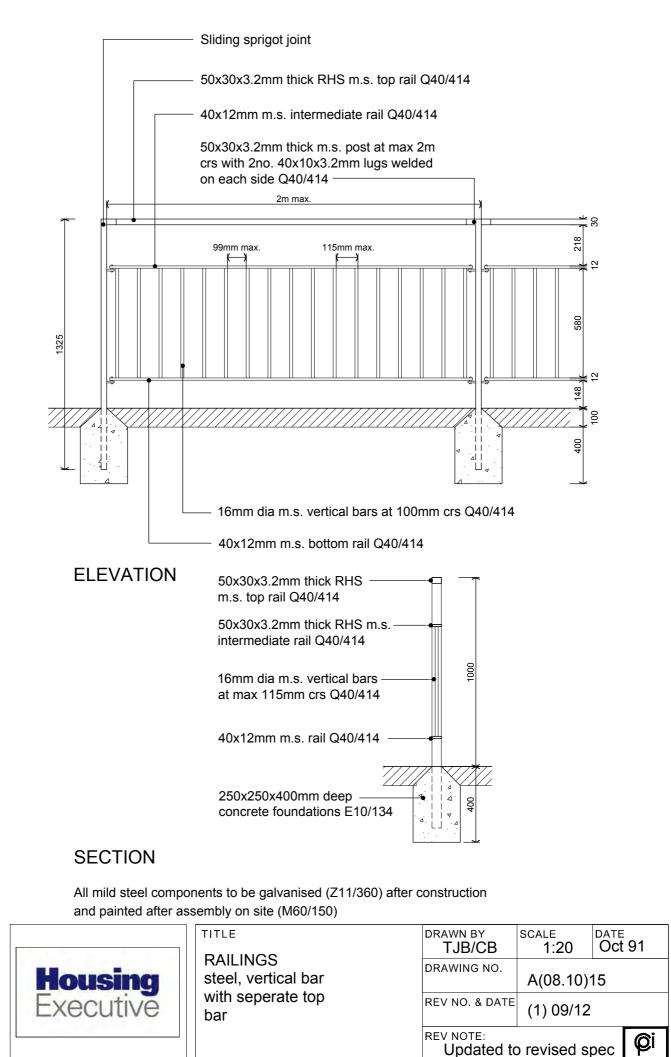


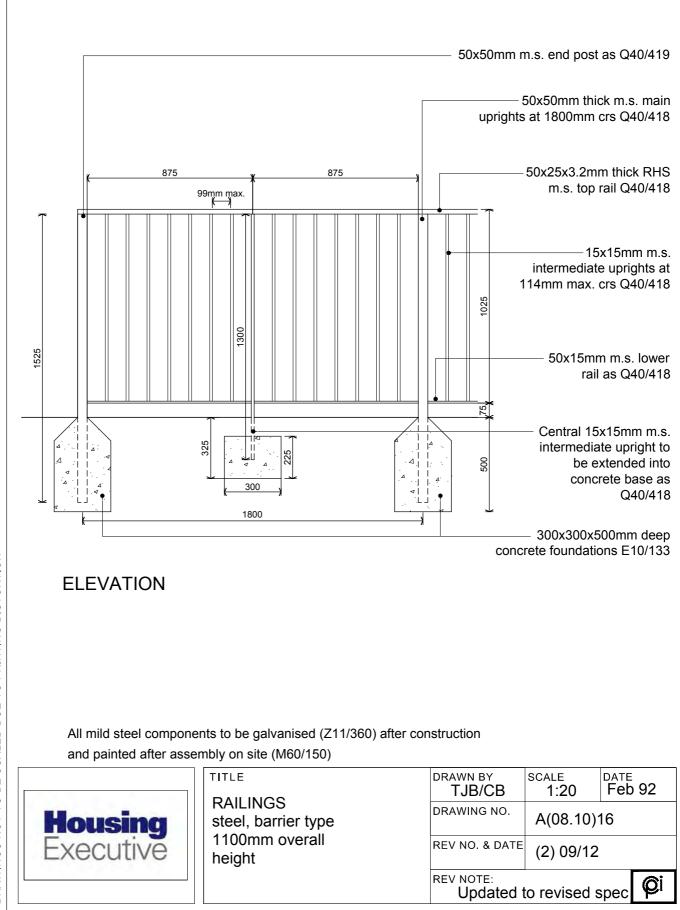


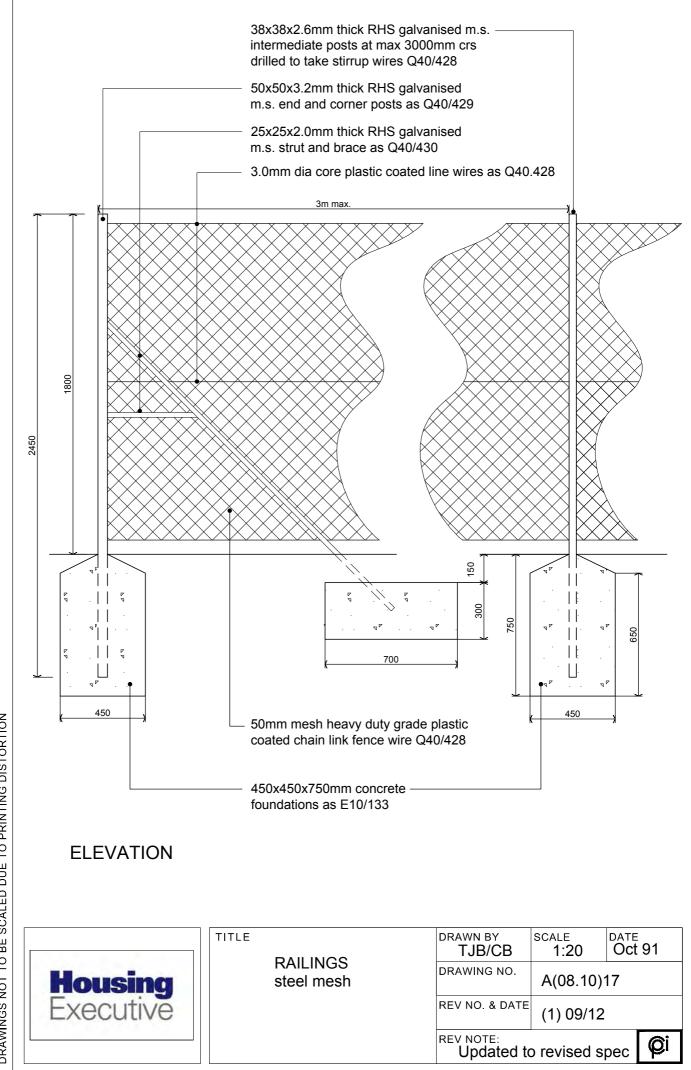
40x40mm RHS m.s. posts Q40/400 at 2600mm crs with 10x40mm welded lugs, 40x40x10mm thick capping plates and 150x150x10mm thick baseplates 13mm dia m.s. uprights with bow tops, at max. 112mm crs Q40/400 40x10mm m.s. rails Q40/400 bolted to lugs 2600 99mm max 99mm max 100, 725 75  $\left\{ \right\}$ ۹P 600 ⊿: 4 . ۵ 40x10mm m.s supports at 900mm max spacing Q40/400 300x300x200mm deep concrete foundations E10/133 300x300x500mm deep concrete foundation E10/133 **ELEVATION** All mild steel components to be galvanised (Z11/360) after construction and painted after assembly on site (M60/150) TITLE DATE Sept 91 DRAWN BY SCALE 1:20 P&S DRAWING NO. **Housing** Executive RAILINGS A(08.10)13 steel bow topped REV NO. & DATE (4) 09/14REV NOTE: Øi Top Rail Lowered

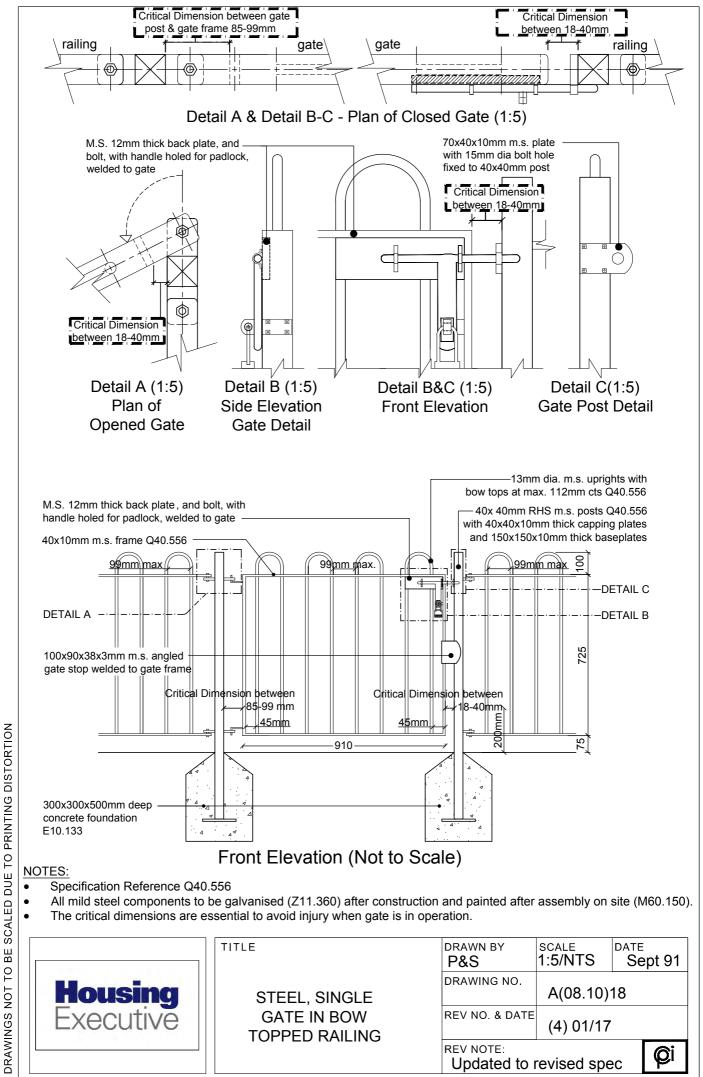
DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION © NIHE 2017







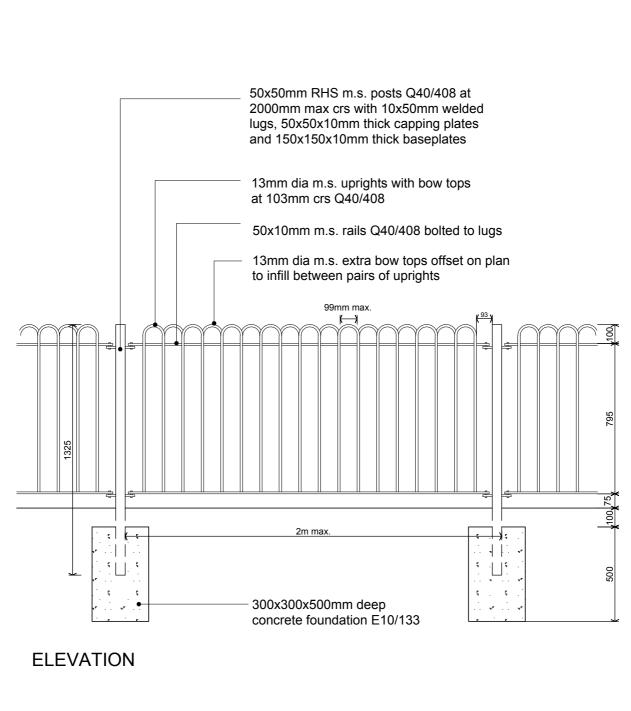


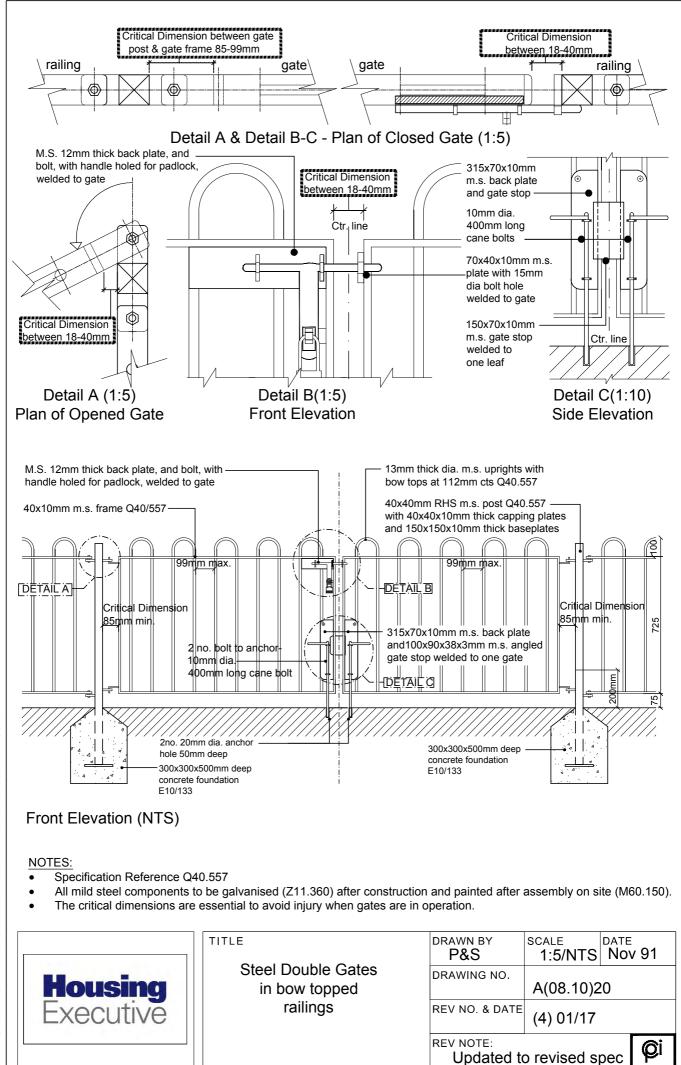


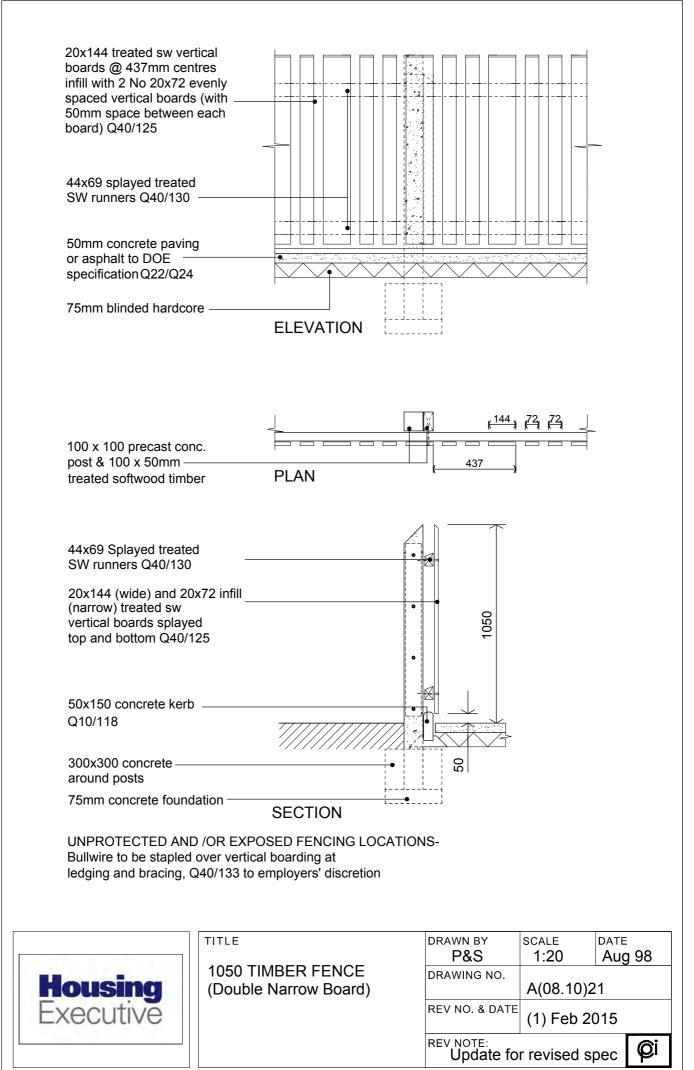
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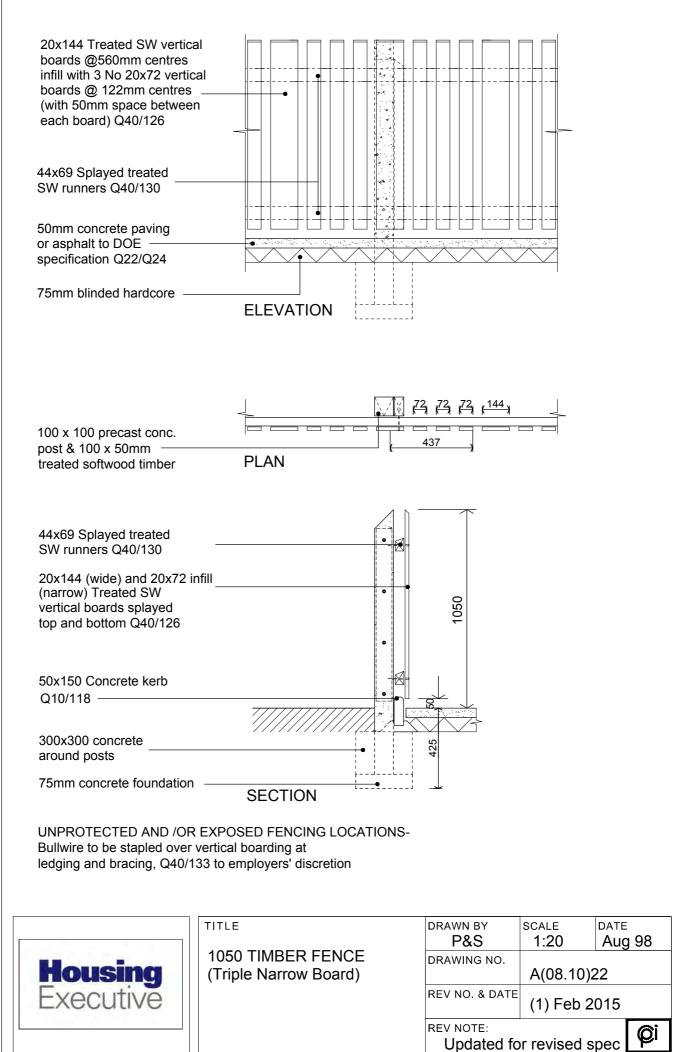


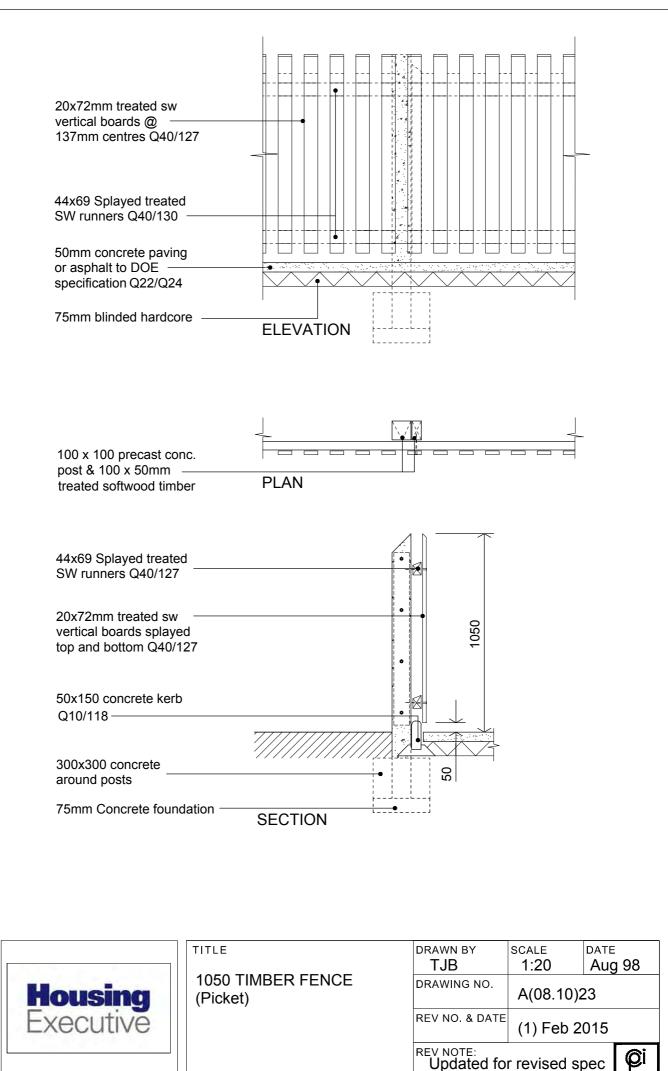
	to be galvanised (Z11/360) after after assembly on site (M60/150)			
<b>lousing</b> Executive	TITLE RAILINGS steel double bow topped	DRAWN BY P&S	scale 1:20	DATE Oct 91
		DRAWING NO.	A(08.10)19	
		REV NO. & DATE	(3) 02/15	
		REV NOTE: Top Rail L	Pi	





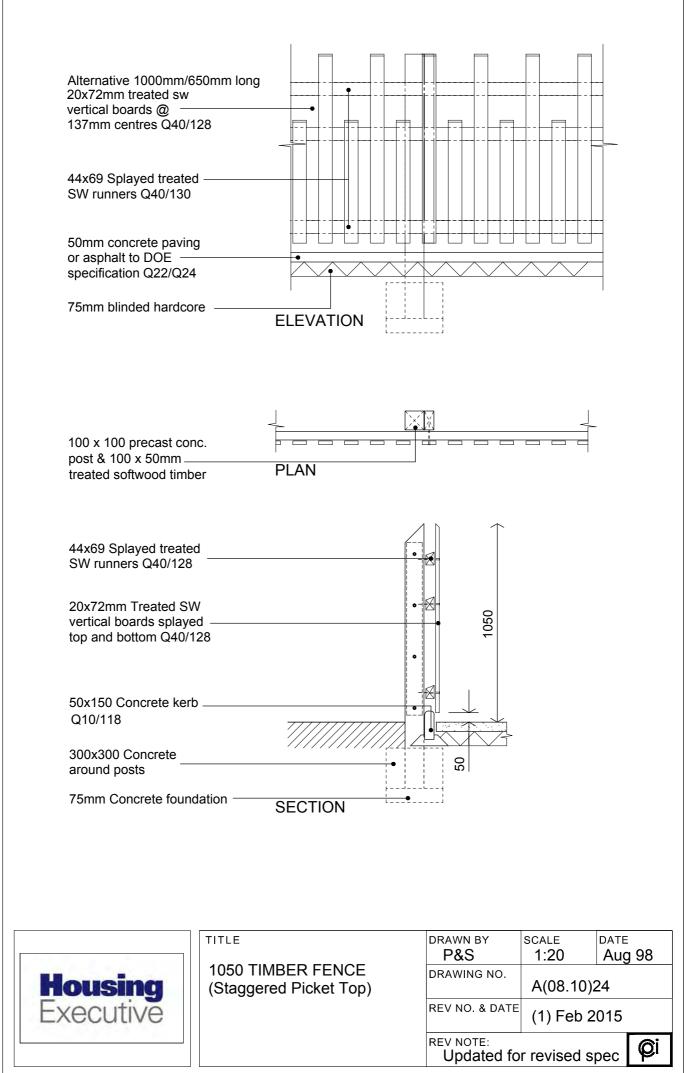


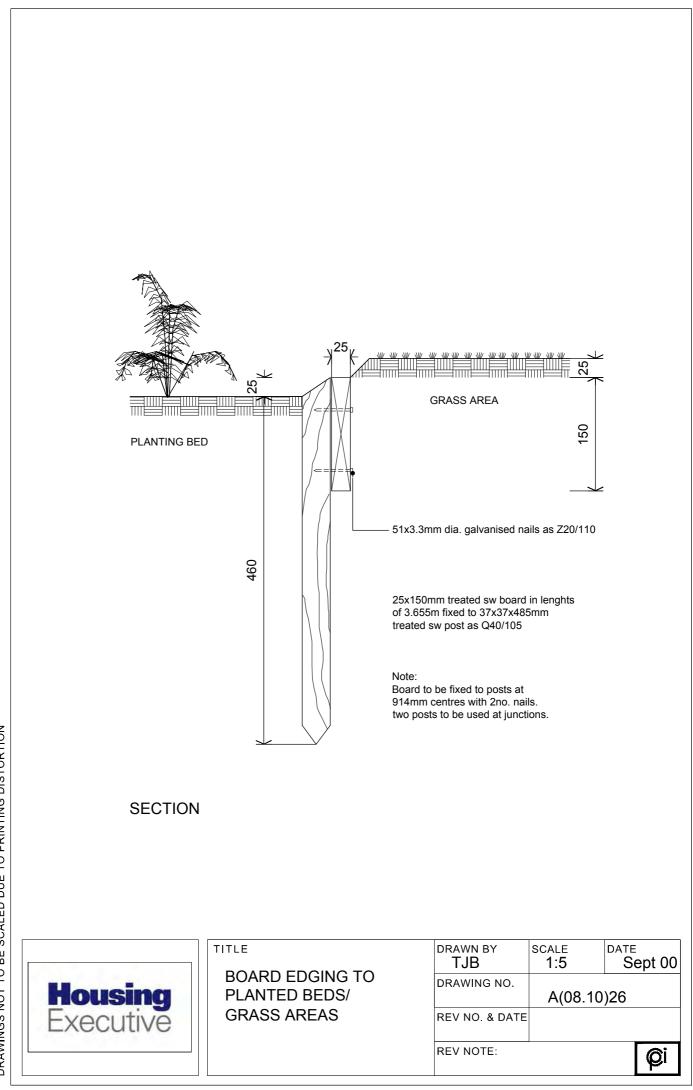


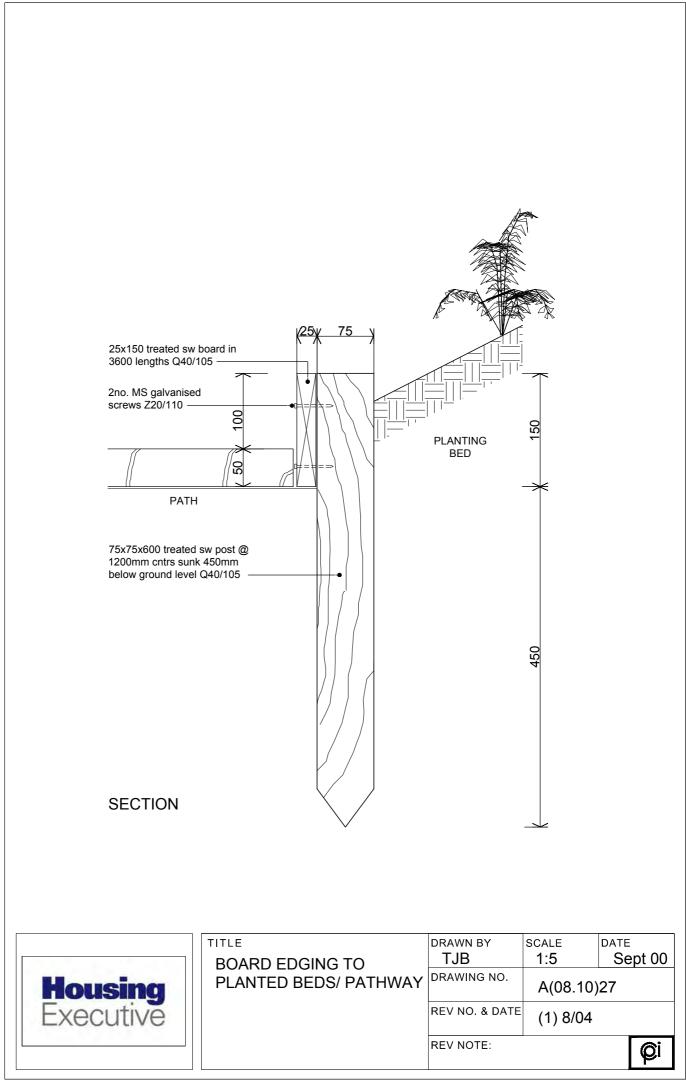


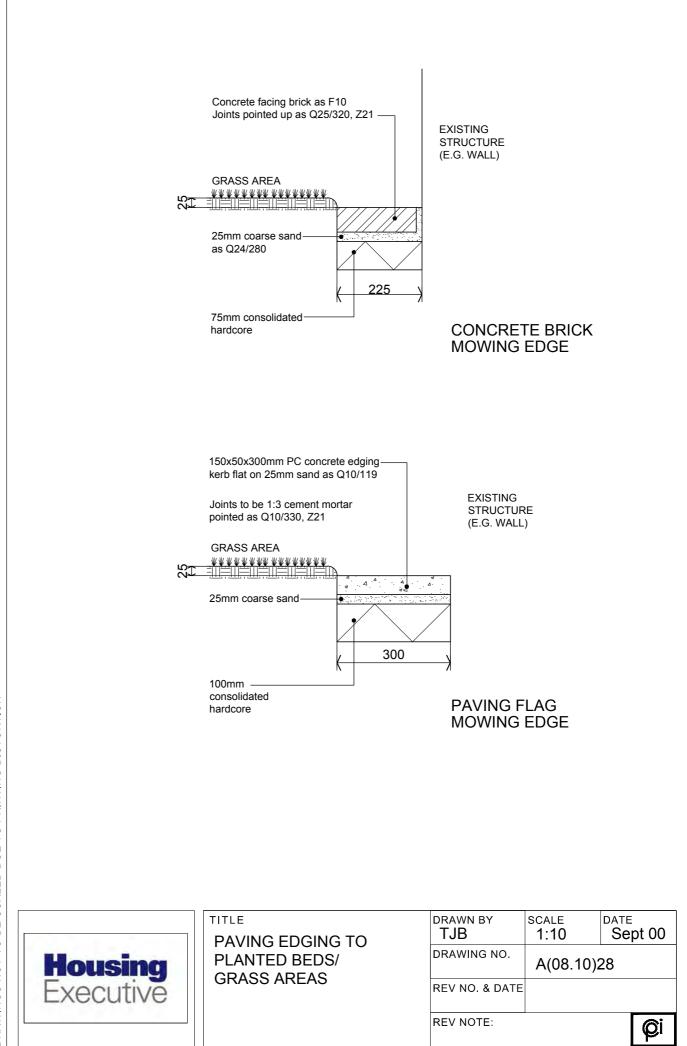
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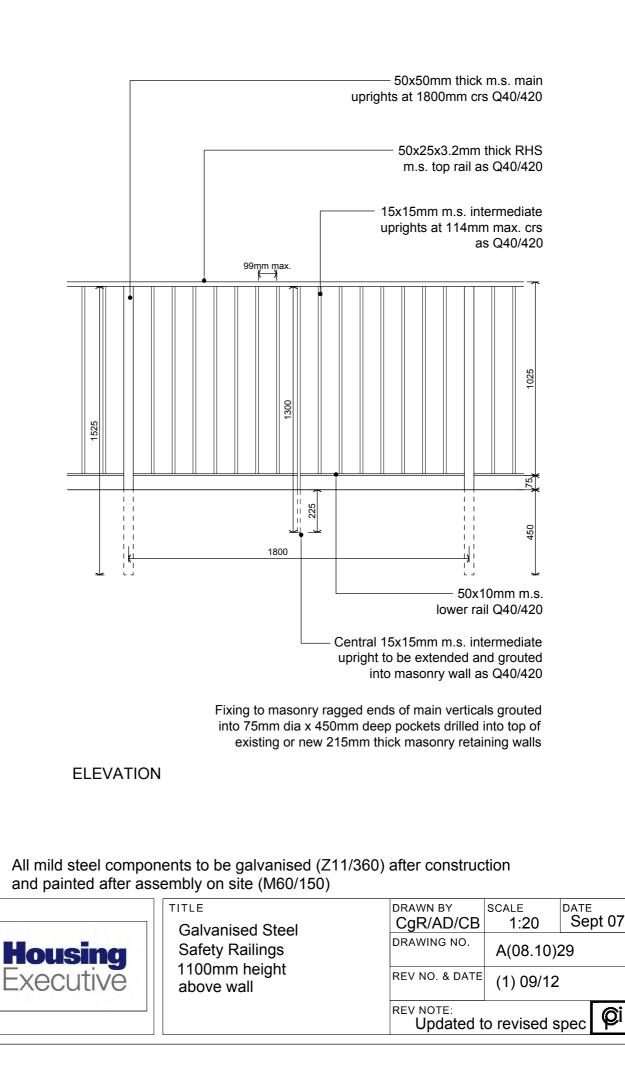
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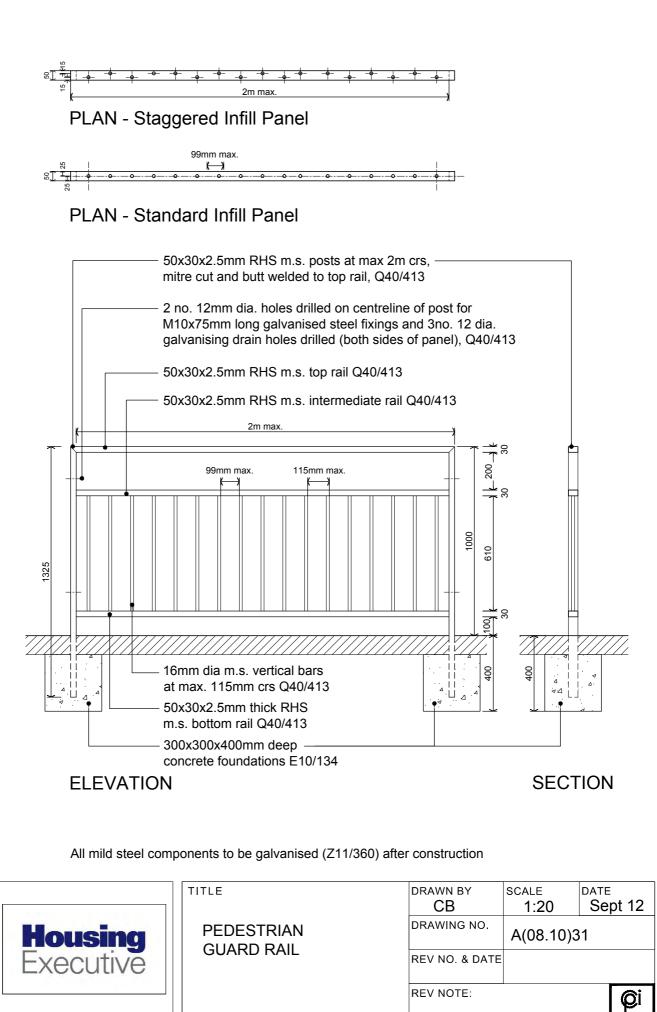


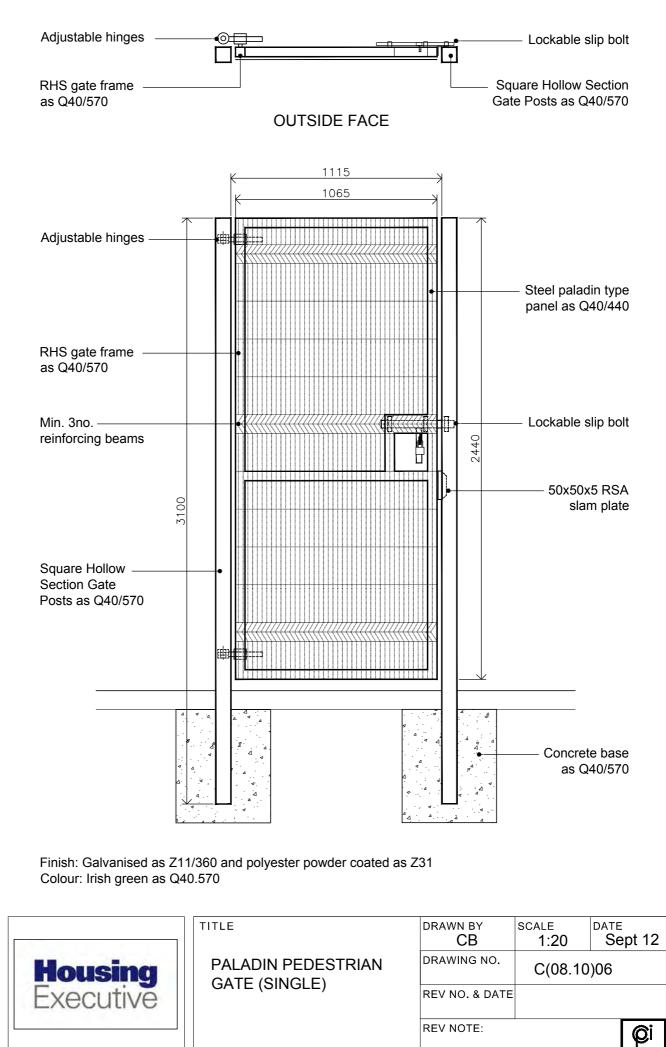


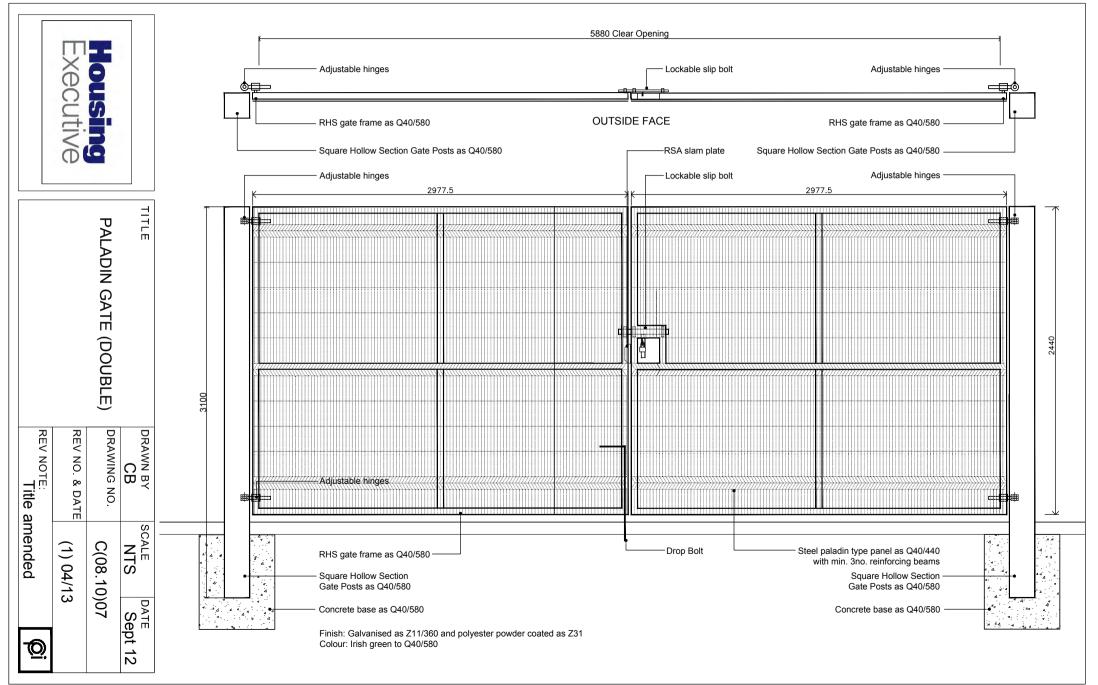




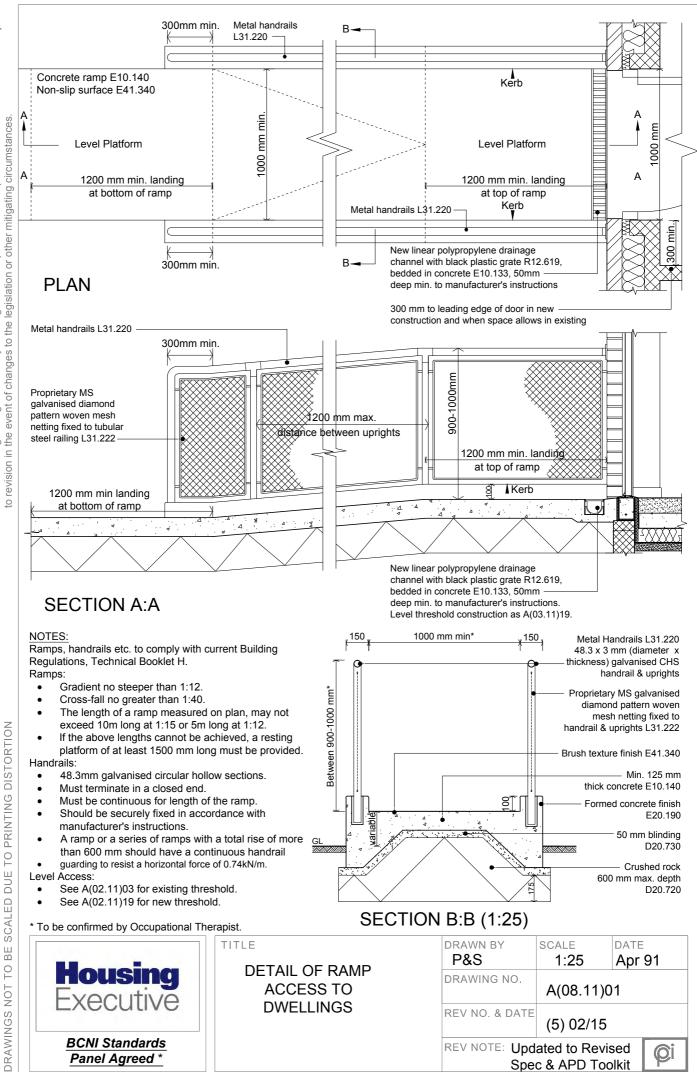


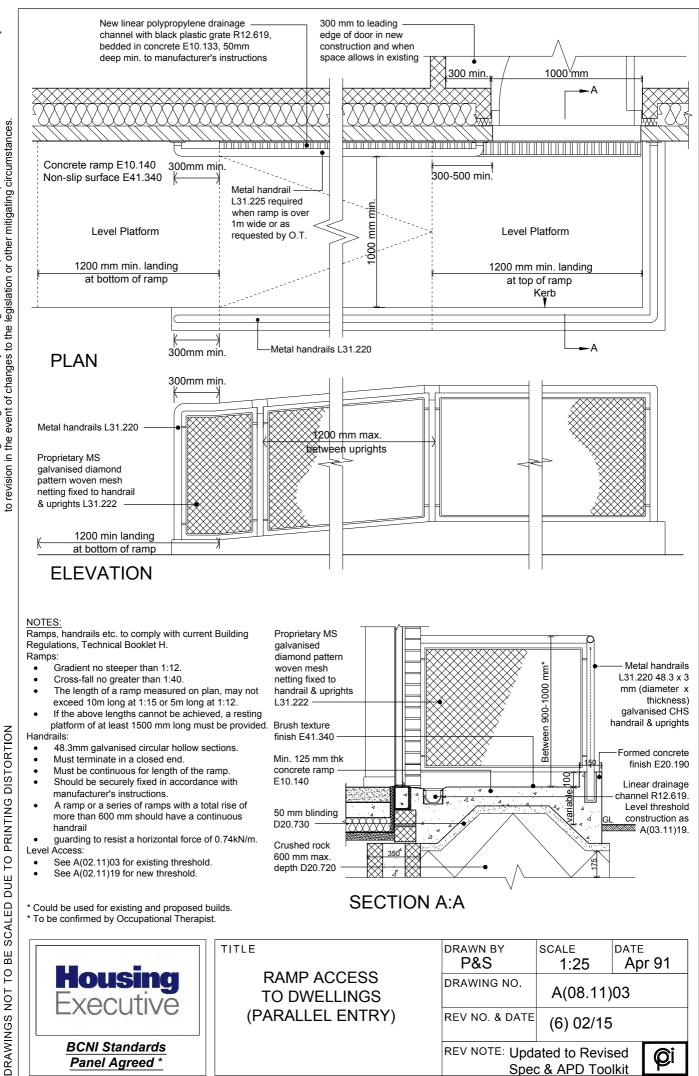




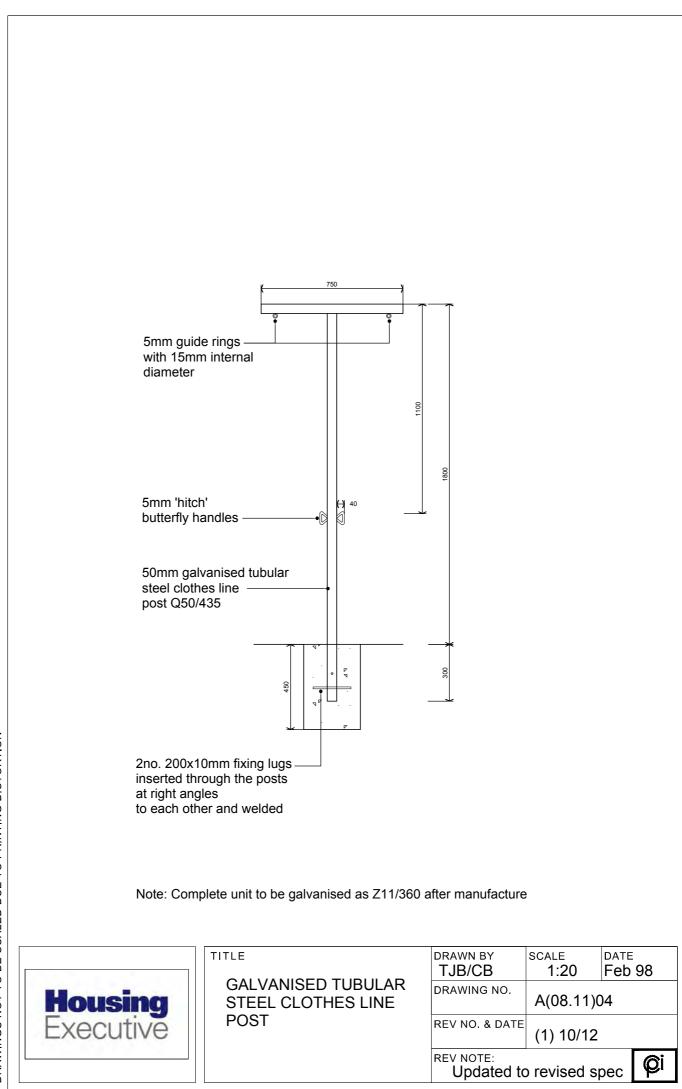


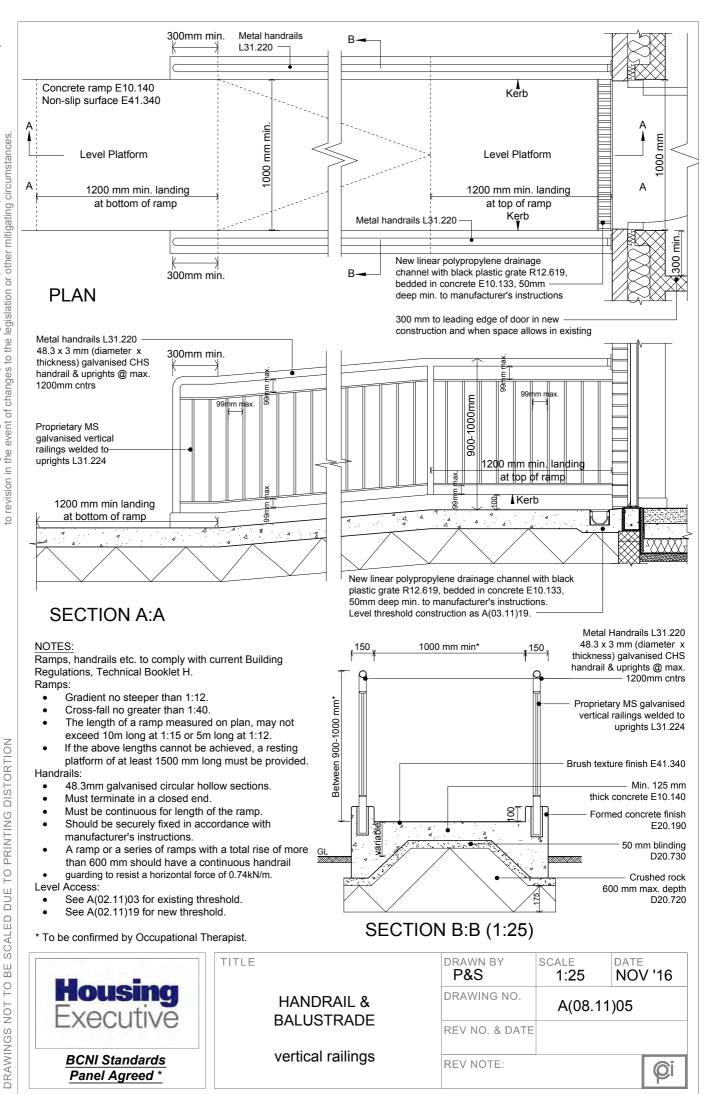
There is no legal obligation for any Building Control department to adopt this recommendation & it is subject to revision in the event of changes to the legislation or other mitigating circumstances. This NIHE produced detail has been examined by The Building Control N.I. Standards Panel and has been considered reasonable in it's interpretation of the relevant requirements of the Building Regulation NI 2012.



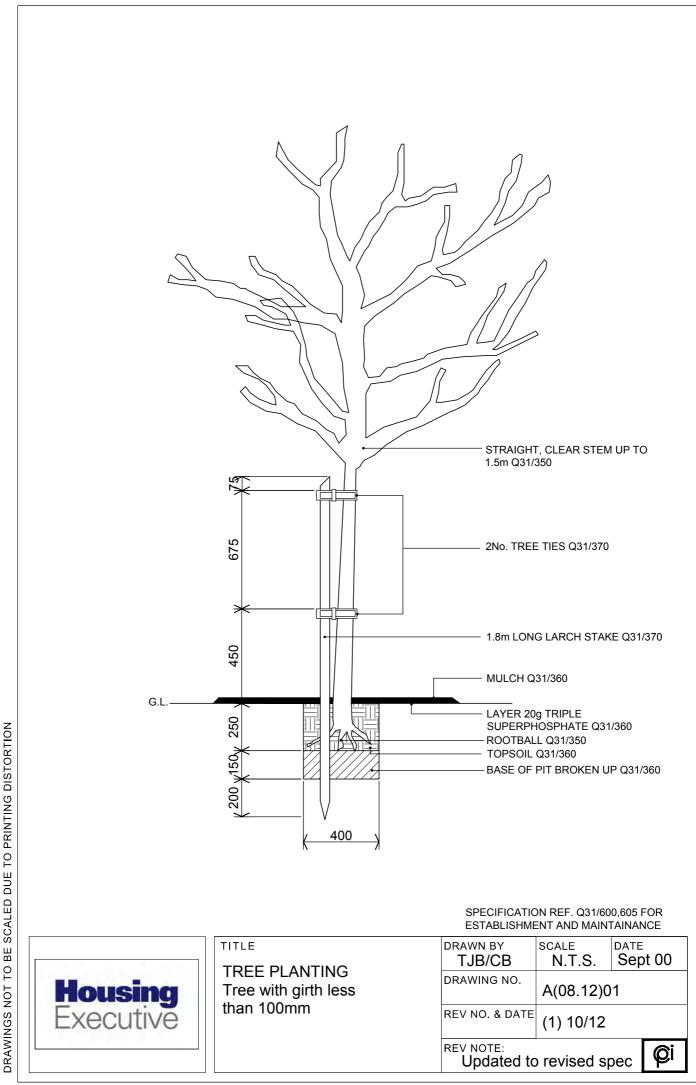


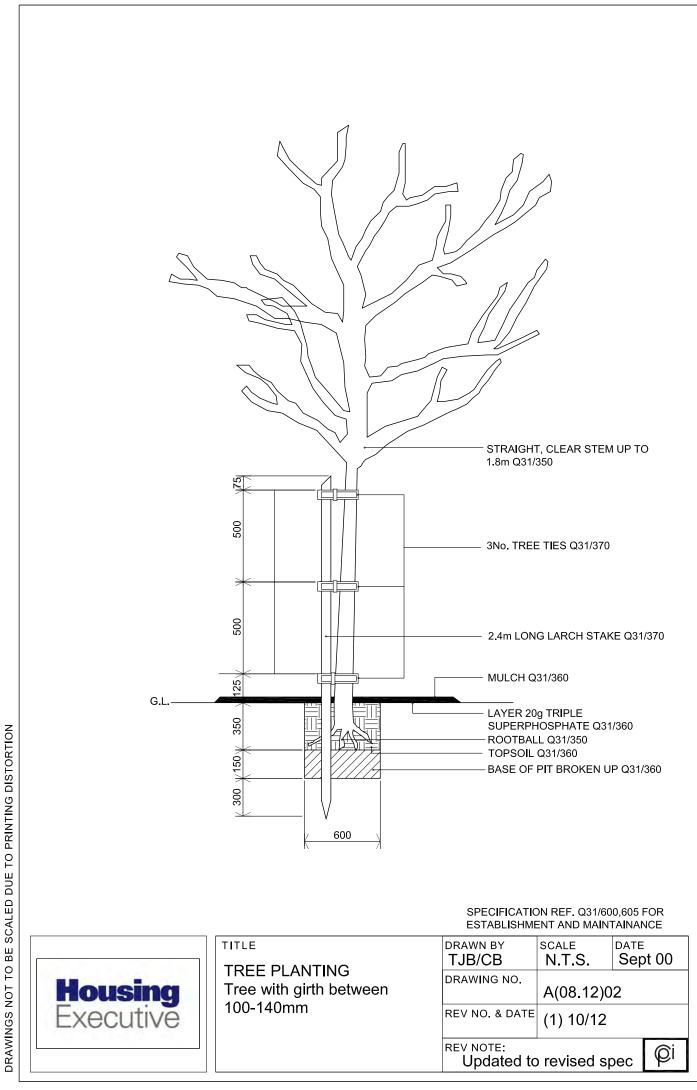
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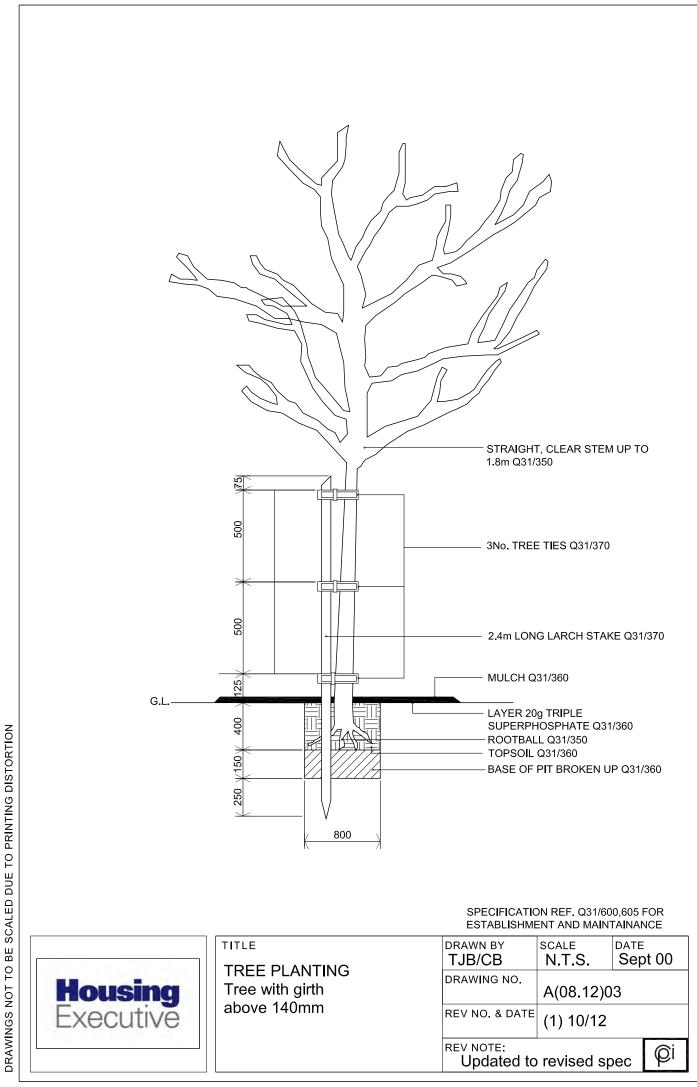


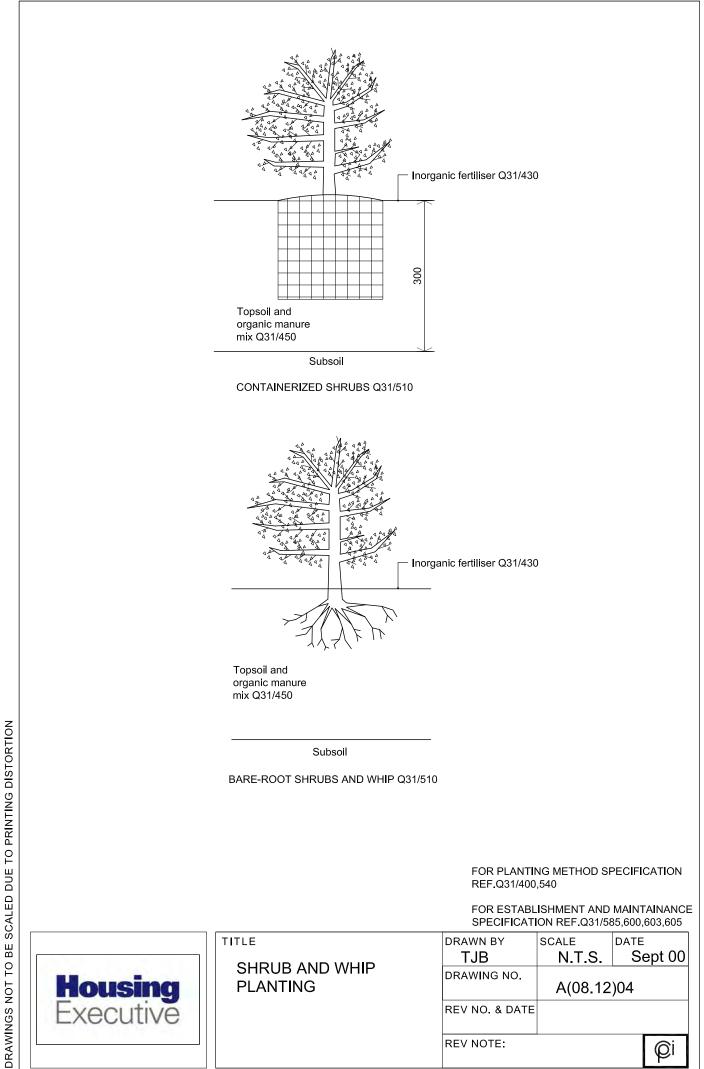


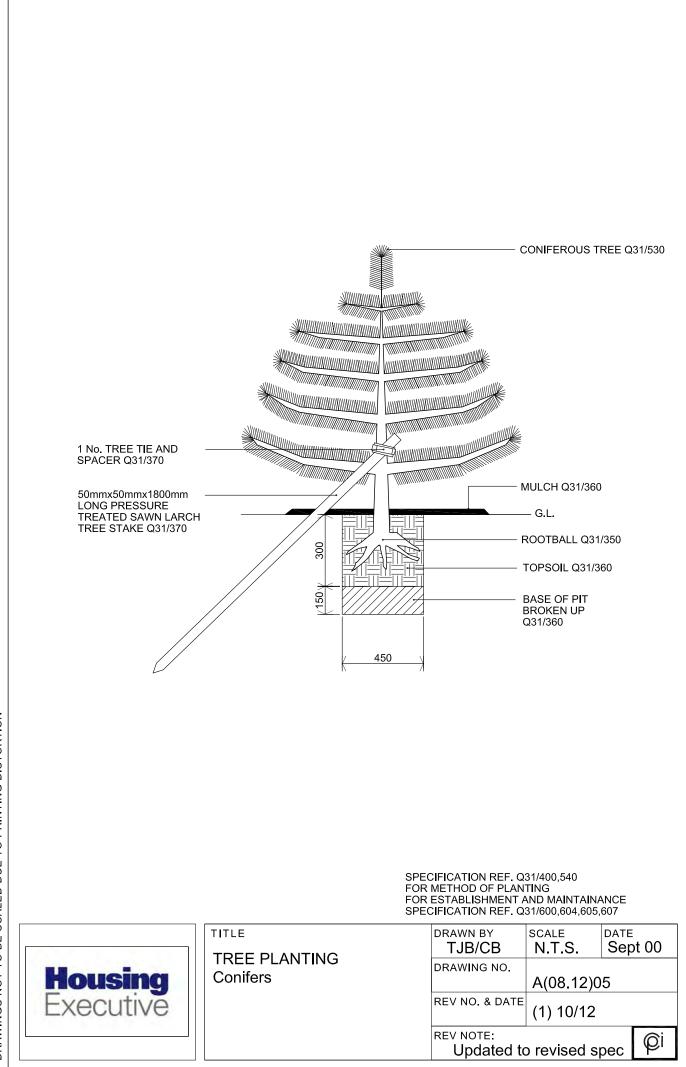
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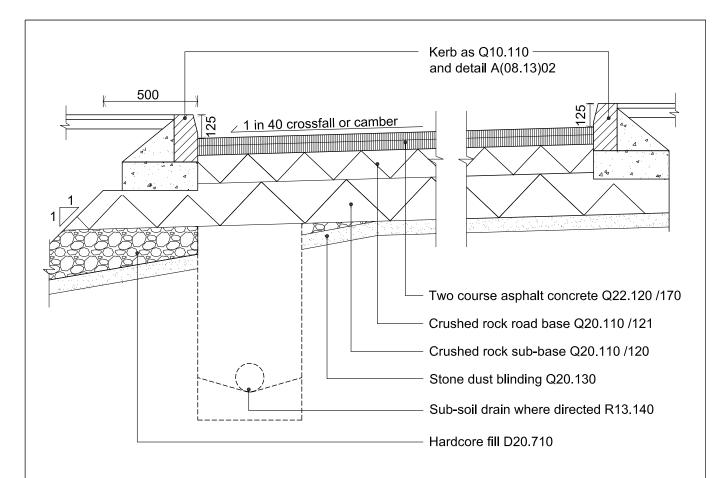








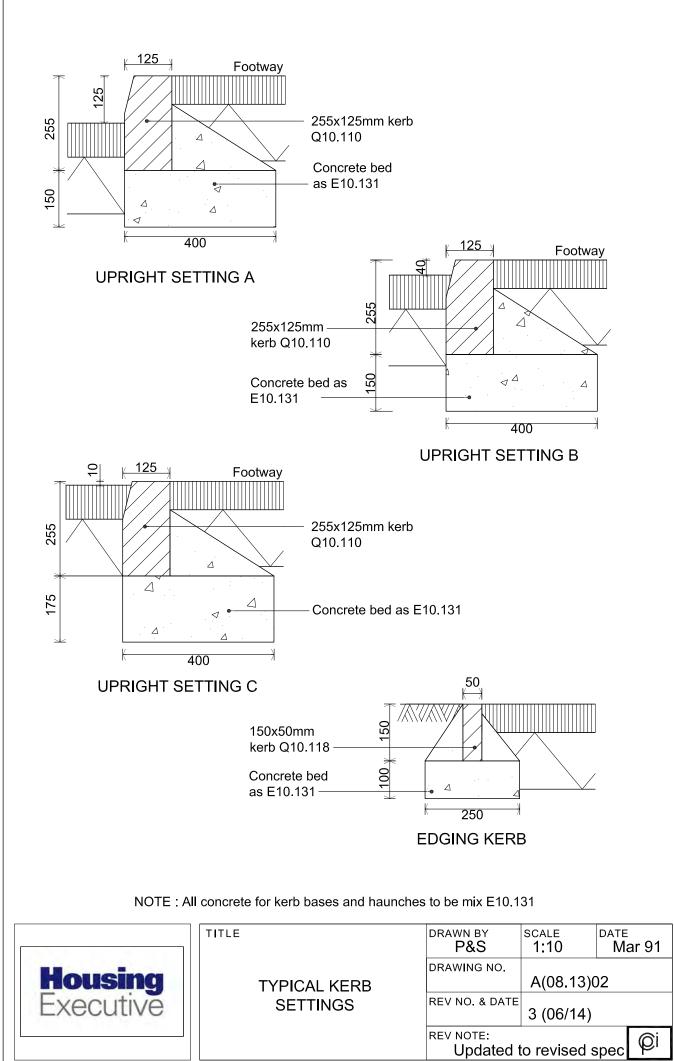
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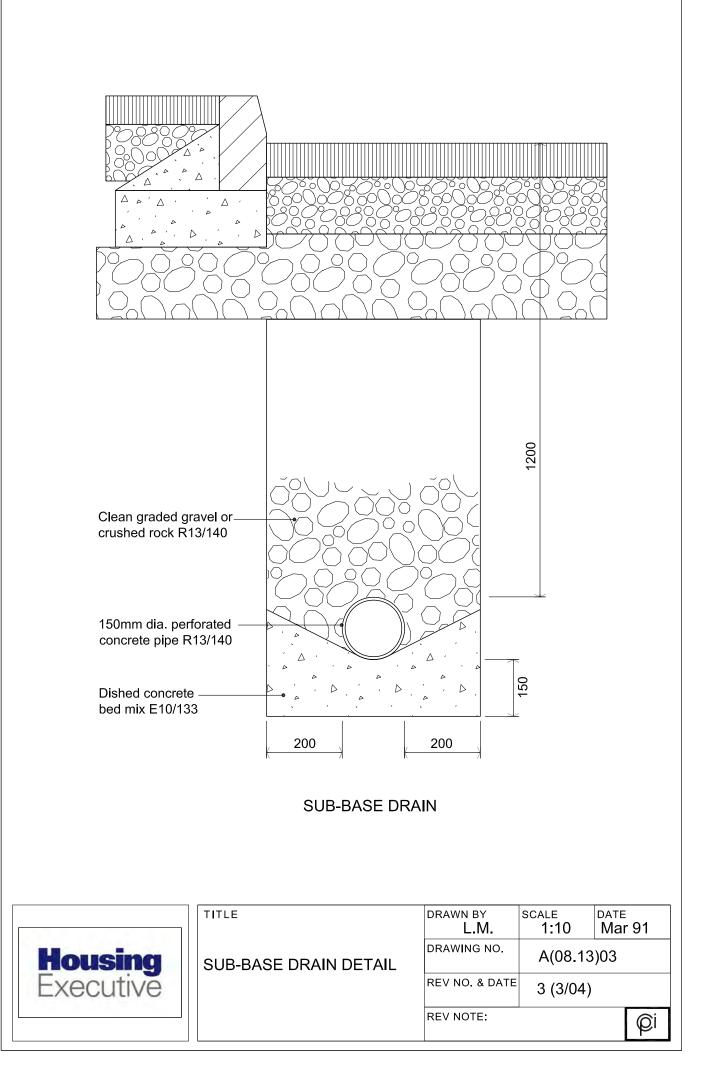


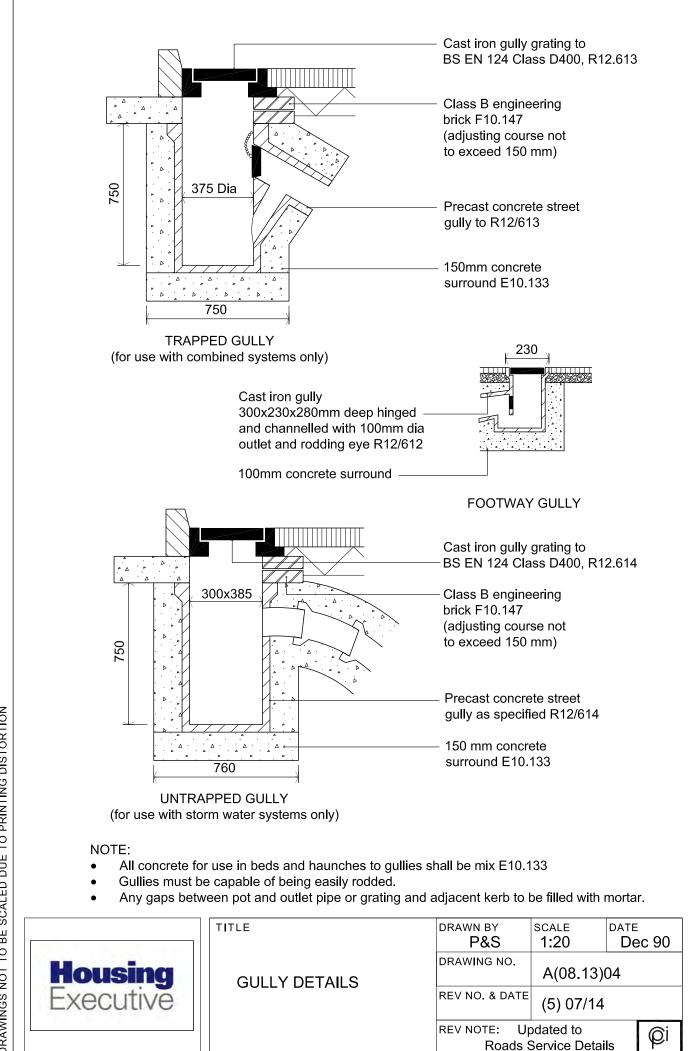
FLEXIBLE CARRIAGEWAY - MINIMUM CONSTRUCTION DEPTHS (mm)					
		CARRIAGEWAY WIDTH			
		6.0m or less	exceeding 6.0m		
SURFACE COURSE	As Q22.120/170	40	40		
BINDER COURSE	As Q22.120/170	60	60		
CRUSHED ROCK ROA	D BASE	150	225		
CRUSHED ROCK SUB-BASE		225	250		
STONE DUST BLINDIN	STONE DUST BLINDING LAYER		75		

- Carriageway width in relation to an irregularly shaped area in a cul-de-sac shall be defined as being the minimum clear distance between edge restraints of the access to the area.
- Where a coloured finish is desired chippings may be applied to asphalt as Q22.316.
- Depths shown are the minimum requirement and may need to be increased in poor ground conditions. Verification should be sought from the Civil Engineer.

BE SC		TITLE	DRAWN BY	scale 1:20	date Mar 91
NOT TO	Housing	FLEXIBLE CARRIAGEWAY	DRAWING NO.	A(08.13)	
	Executive	Typical cross section	REV NO. & DATE	(3) 06/14	
DRAWINGS				Jpdated to Service Det	ails Pİ

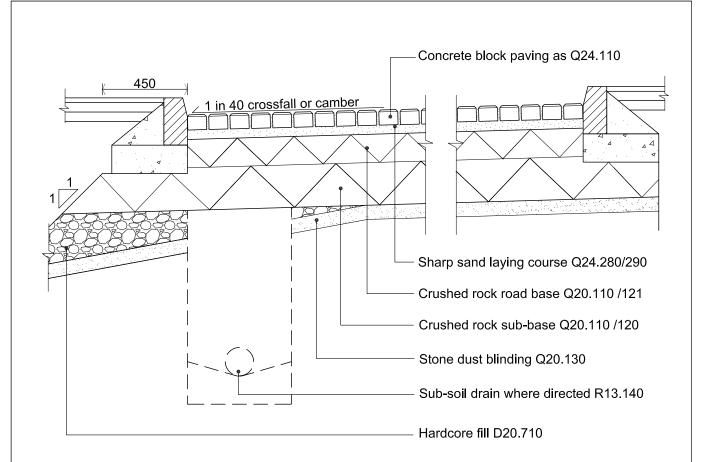






SCALED DUE TO PRINTING DISTORTION DRAWINGS NOT TO BE © NIHE 2015

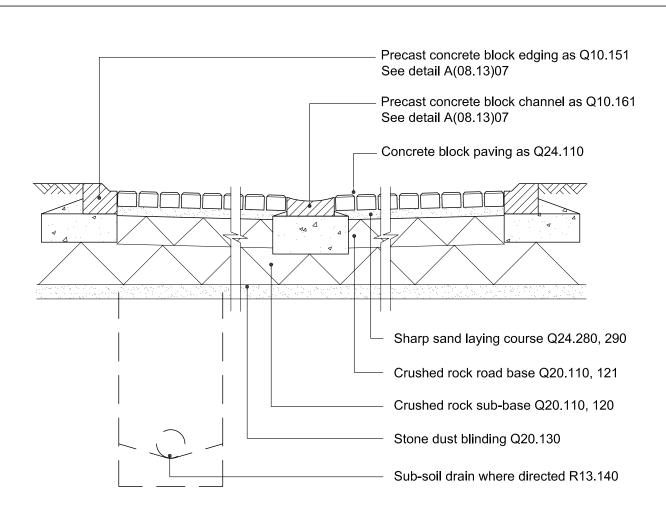
Qί



PAVING BLOCK CARRIAGEWAY - MINIMUM CONSTRUCTION DEPTHS (mm)				
	CARRIAGEWAY WIDTH			
	6.0m or less exceeding 6.0m			
CONCRETE PAVING BLOCK	80	80		
SAND LAYING COURSE	50	50		
CRUSHED ROCK ROAD BASE	150	225		
CRUSHED ROCK SUB-BASE	225	250		
STONE DUST BLINDING LAYER	75	75		

- Carriageway width in relation to an irregularly shaped area in a cul-de-sac shall be defined as being the minimum clear distance between edge restraints of the access to the area.
- Depths shown are the minimum requirement and may need to be increased in poor ground conditions. Verification should be sought from the Civil Engineer.

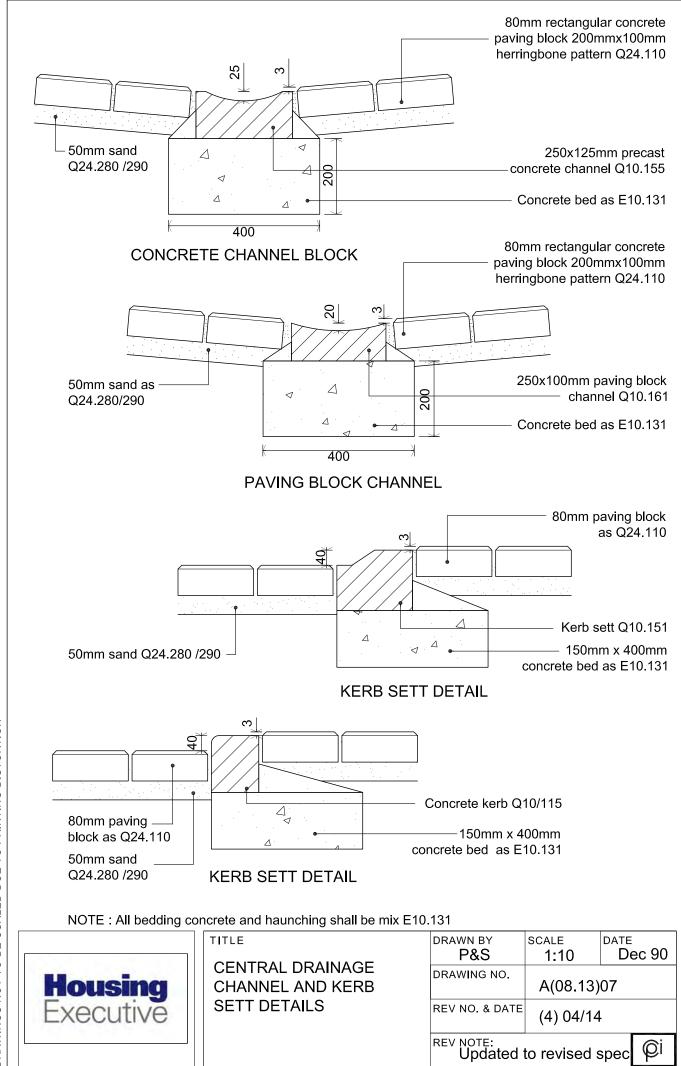
D BE SC		TITLE	drawn by <b>P&amp;S</b>	scale 1:20	date Mar 91
νοτ το	Housing	CONCRETE PAVOIR CARRIAGEWAY	DRAWING NO.	A(08.13)	05
NGS N	Executive	tunical cross socian	REV NO. & DATE	(3) 04/14	
DRAW		typical cross section	REV NOTE: Updated to	revised spe	ec Pi



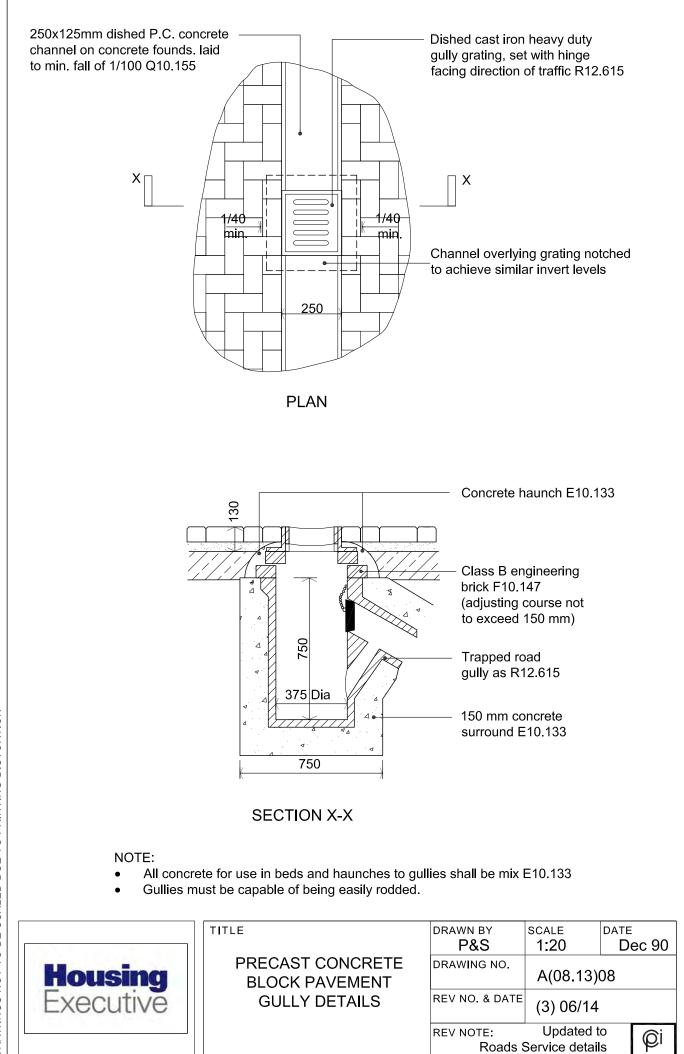
PAVOIR SHARED SURFACE - MINIMUM CONSTRUCTION DEPTHS (mm)				
	CARRIAGEWAY WIDTH			
	6.0m or less	exceeding 6.0m		
CONCRETE PAVING BLOCK	80	80		
SAND LAYING COURSE	50	50		
CRUSHED ROCK ROAD BASE	150	225		
CRUSHED ROCK SUB-BASE	225	250		
STONE DUST BLINDING LAYER	75	75		

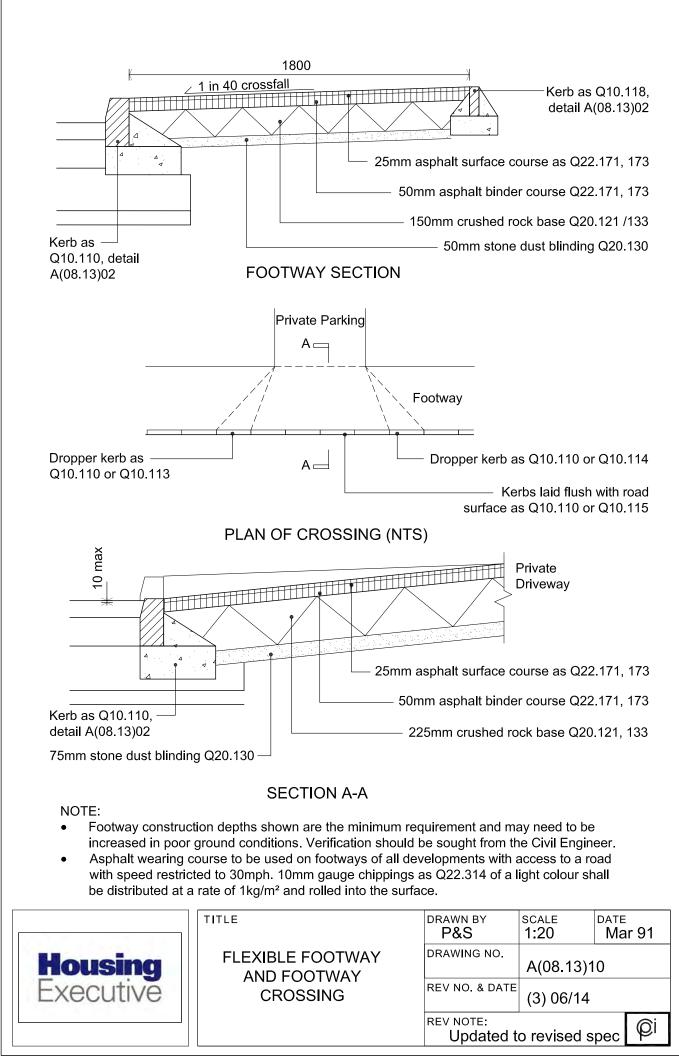
- Carriageway width in relation to an irregularly shaped area in a cul-de-sac shall be defined as being the minimum clear distance between edge restraints of the access to the area.
- Depths shown are the minimum requirement and may need to be increased in poor ground conditions. Verification should be sought from the Civil Engineer.

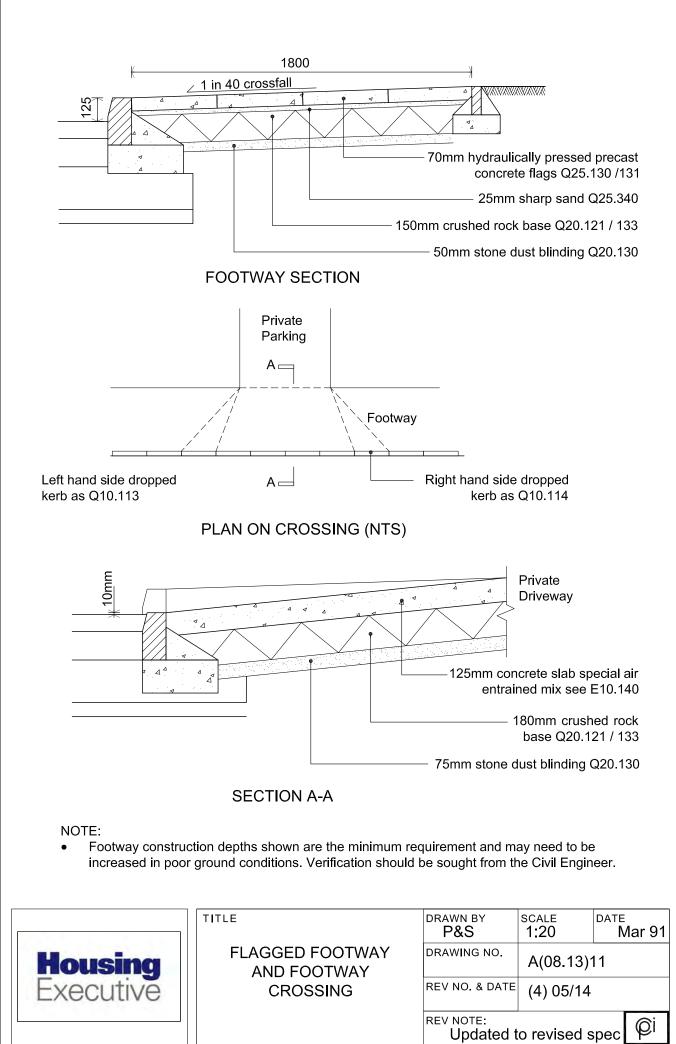
BE SC			drawn by <b>P&amp;S</b>	scale 1:20	date Ma	ır 91
NOT TO	Housing	CONCRETE PAVOIR SHARED SURFACE	DRAWING NO.	A(08.13)	06	
AWINGS	Executive	typical cross section	REV NO. & DATE	(3) 06/14		
DRAW			REV NOTE: Updated to r	revised spe	C	фi

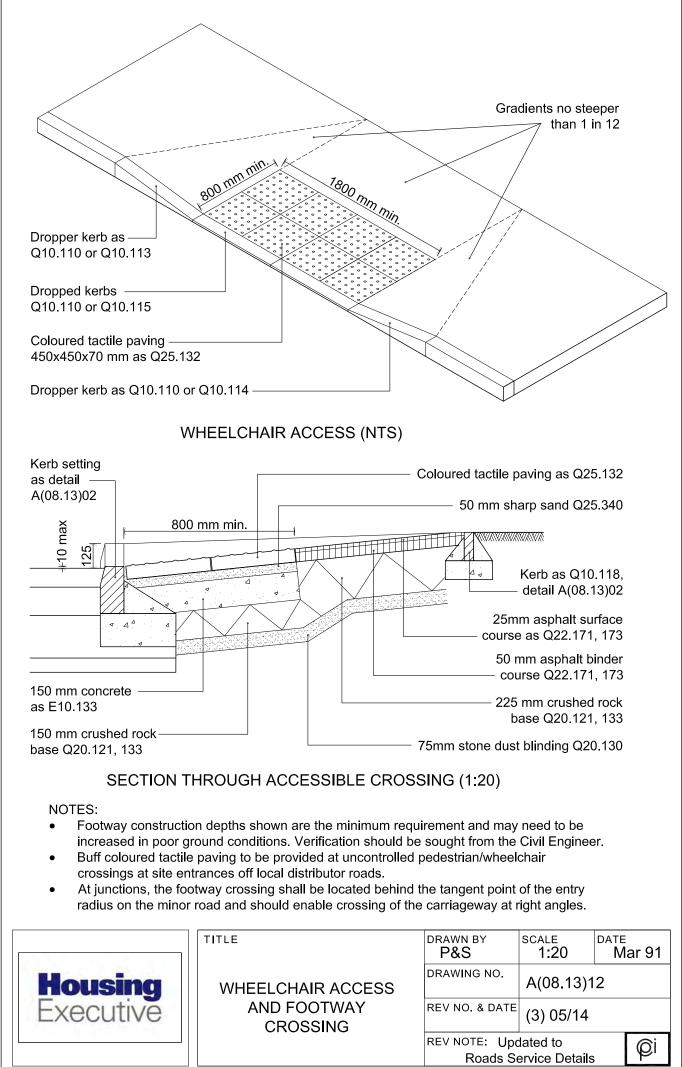


SCALED DUE TO PRINTING DISTORTION DRAWINGS NOT TO BE

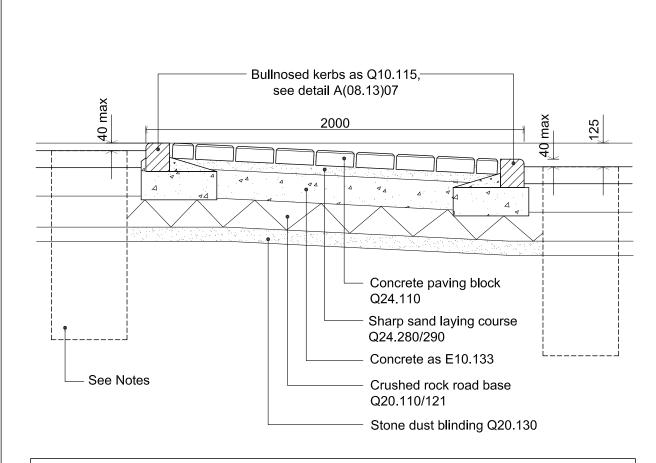








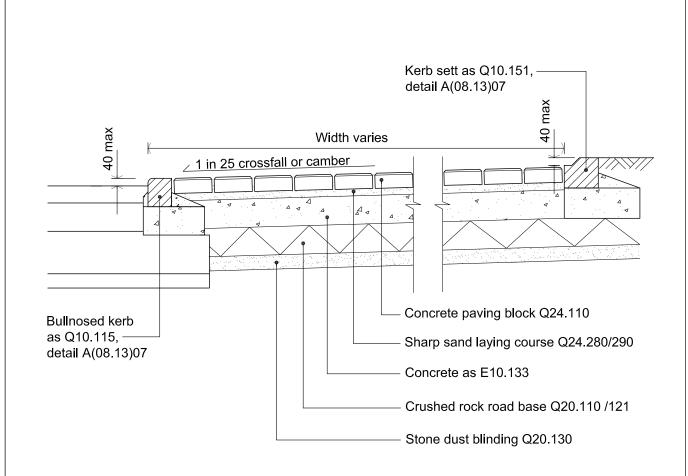
SCALED DUE TO PRINTING DISTORTION DRAWINGS NOT TO BE



RUMBLE STRIP - MINIMUM CONSTRUCTION DEPTHS (mm)			
CONCRETE PAVING BLOCK	80		
SAND LAYING COURSE	50		
CONCRETE	150		
CRUSHED ROCK ROAD BASE	150		
STONE DUST BLINDING LAYER	75		

- Gullies shall be sited on each side of carriageway or shared surface on the upper side of and immediately adjacent to the rumble strip.
- Where the shared surface is to be surfaced using paving blocks the row of kerbs at the back of the rumble strip shall be omitted.
- Depths shown are the minimum requirement and may need to be increased in poor ground conditions. Verification should be sought from the Civil Engineer.

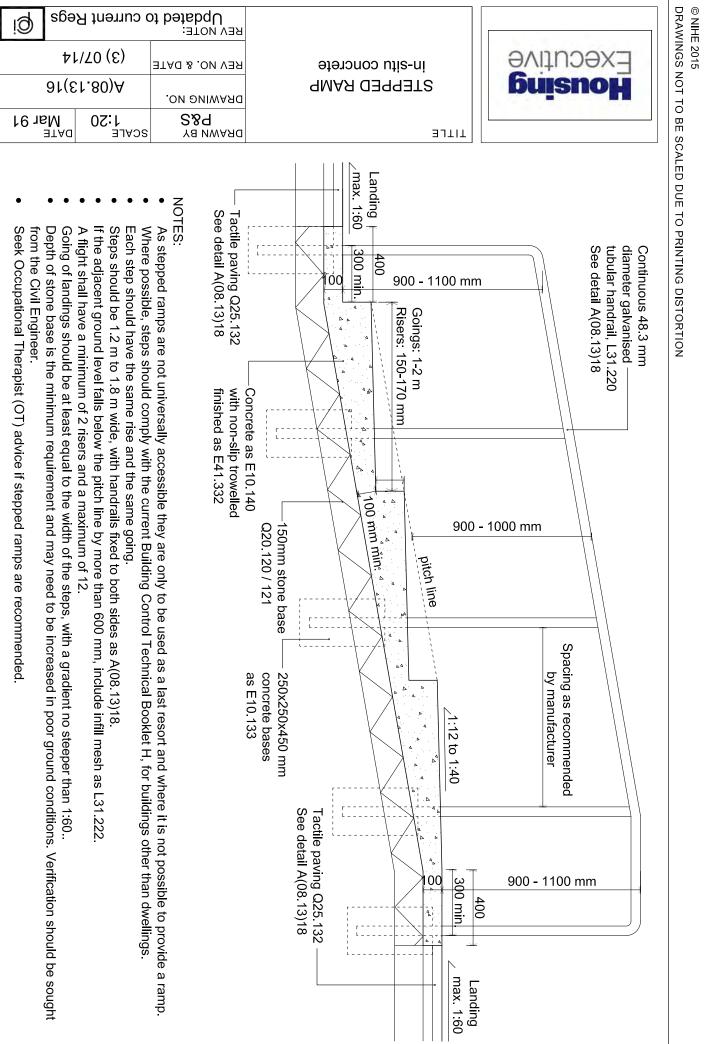
) BE S(		TITLE	DRAWN BY P&S	scale 1:20	DATE M	ar 91
NOT TO	Housing	RUMBLE STRIP	DRAWING NO.	A(08.13	3)13	
	Executive	typical cross section	REV NO. & DATE	(4) 05/1	4	
DRAWINGS				pdated to Service Detai	ils	Юį

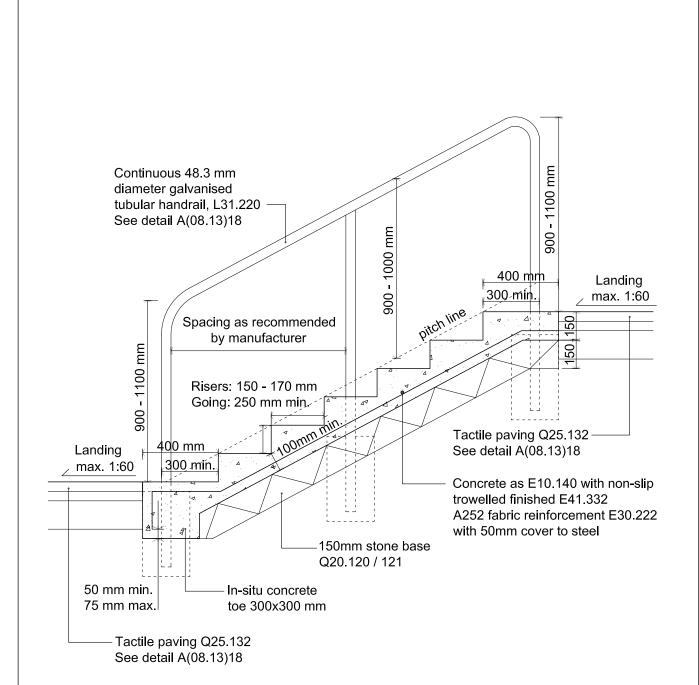


MOUNTABLE SHOULDER PAVING BLOCK CONSTRUCTION (mm)				
CONCRETE PAVING BLOCK	80			
SAND LAYING COURSE	50			
CONCRETE	150			
CRUSHED ROCK ROAD BASE	150			
STONE DUST BLINDING LAYER	75			

• Depths shown are the minimum requirement and may need to be increased in poor ground conditions. Verification should be sought from the Civil Engineer.

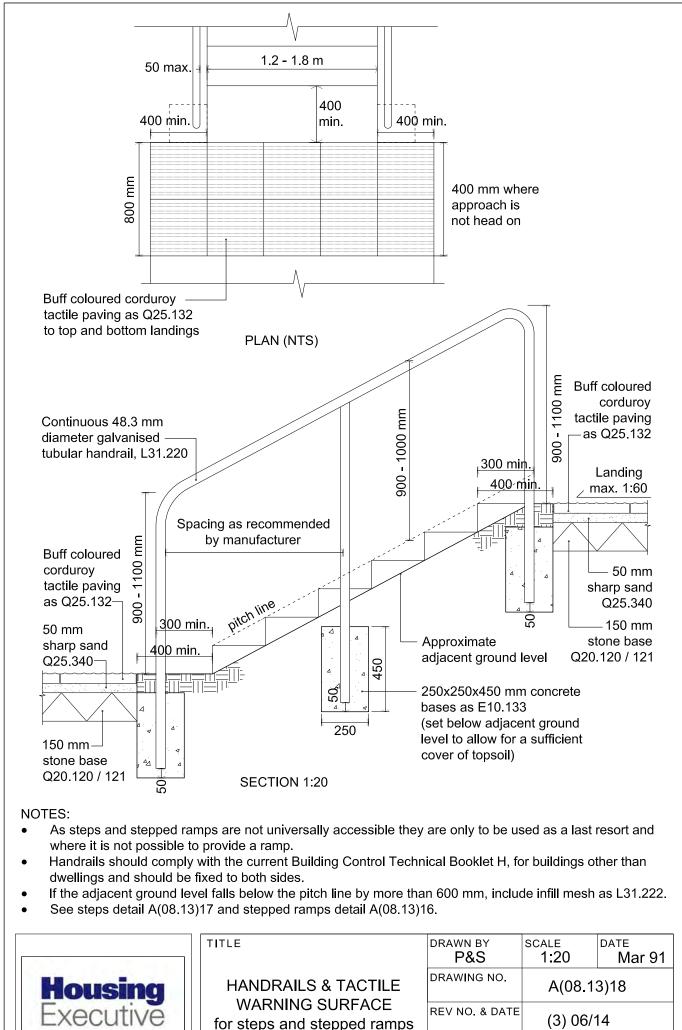
<u> </u>		TITLE CONCRETE PAVOIR	drawn by P&S	scale 1:20	date Mar	
	Housing	MOUNTABLE SHOULDER Typical cross section	DRAWING NO.	A(08.13)	)14	
	Executive		REV NO. & DATE	(4) 05/14	4	
DRAW				Jpdated to Service Deta	ils	фi





- As steps are not universally accessible they are only to be used as a last resort and where it is not possible to provide a ramp.
- Where possible, steps should comply with the current Building Control Technical Booklet H, for buildings other than dwellings.
- Steps should be 1.2 m to 1.8 m wide, with handrails fixed to both sides as A(08.13)10.
- If the adjacent ground level falls below the pitch line by more than 600 mm, include infill mesh as L31.222.
- A flight shall have a minimum of 2 risers and a maximum of 12.
- Going of landings should be at least equal to the width of the steps, with a gradient no steeper than 1:60.
- Depth of stone base is the minimum requirement and may need to be increased in poor ground conditions. Verification should be sought from the Civil Engineer.
- Seek Occupational Therapist (OT) advice if stepped ramps are recommended.

BE SC		TITLE	drawn by P&S	scale 1:20	date Ma	r 91
NOT TO	Housing	FOOTPATH STEPS	DRAWING NO.	A(08.13) <sup>2</sup>	17	
	Executive	in-situ concrete	REV NO. & DATE	(3) 07/14		
DRAWINGS			REV NOTE: Updated to	current Re	egs	фi

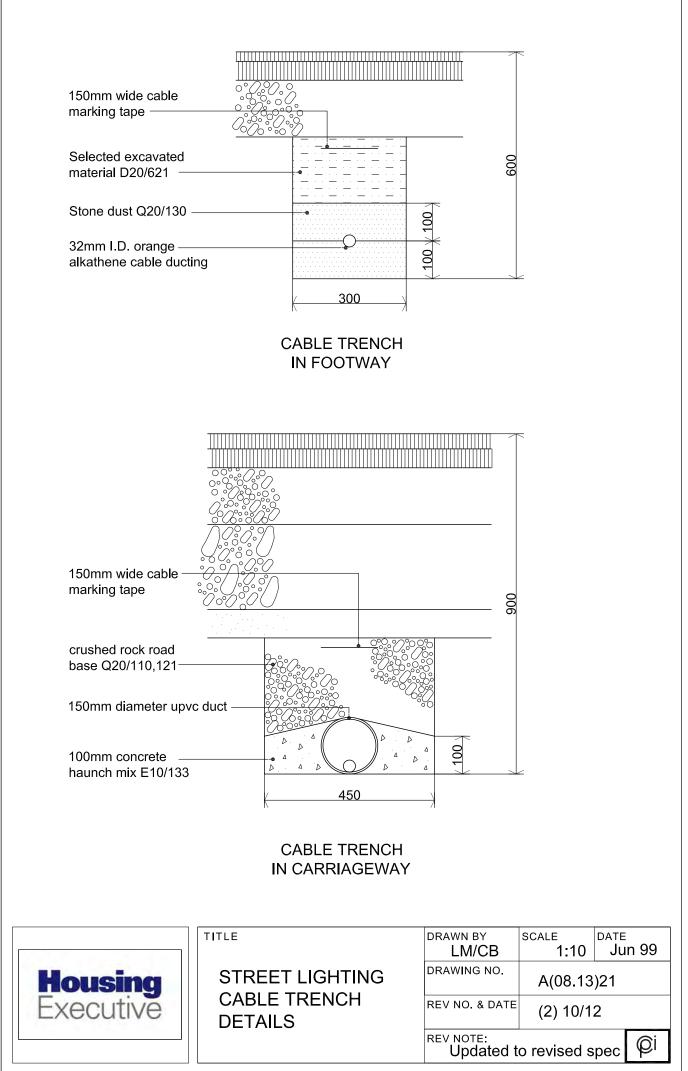


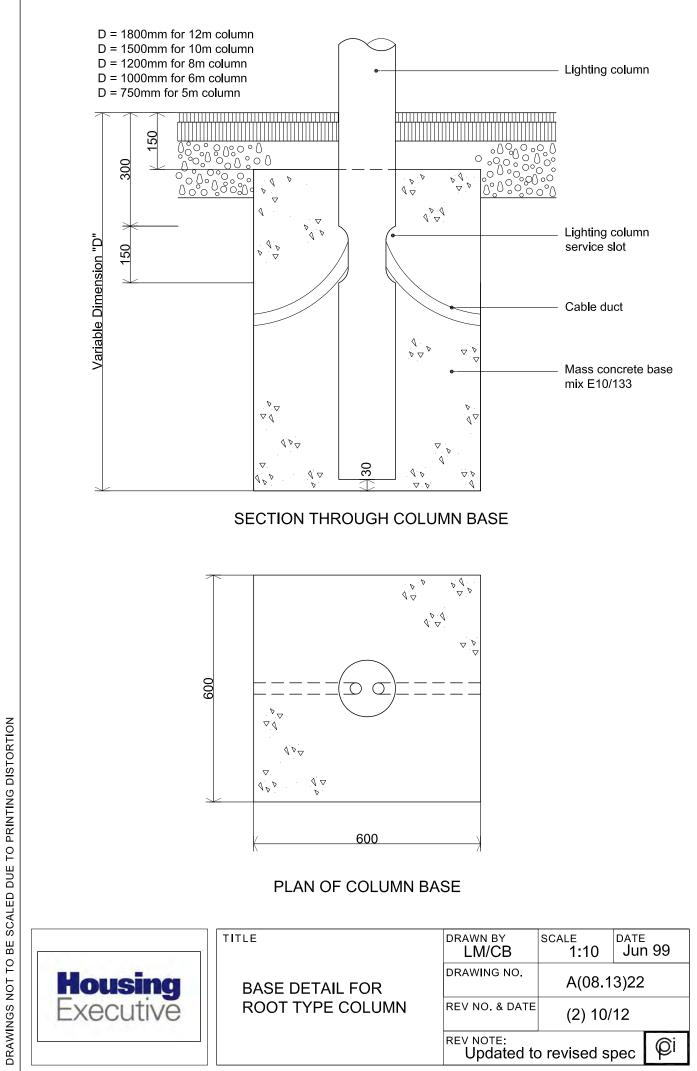
**REV NOTE:** 

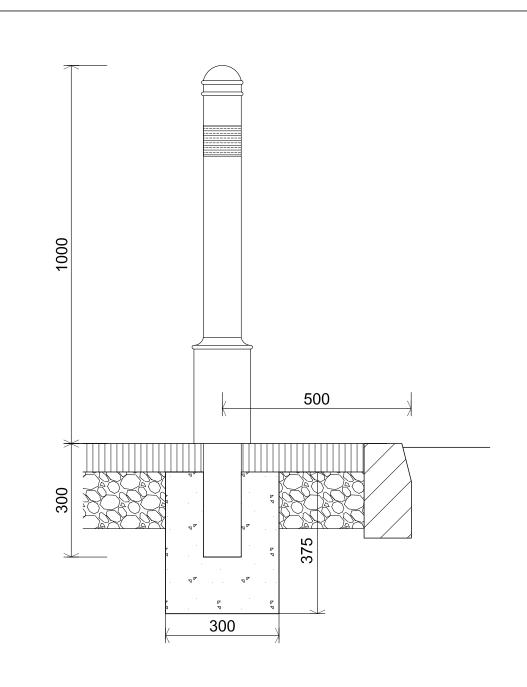
Updated to current Regs

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SCALED DUE TO PRINTING DISTORTION DRAWINGS NOT TO BE







TYPICAL BOLLARD DETAIL

(for use at pedestrian crossing points and raised junctions)

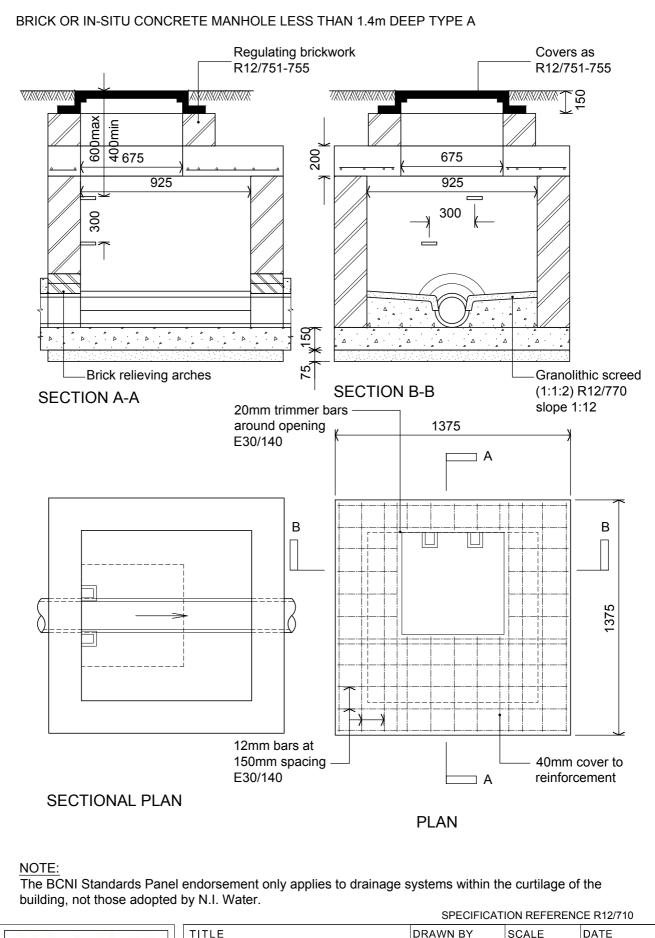
## NOTE:

- 1. Bollards manufactured in galvanised tubular steel and painted black.
- 2. Bollards set in concrete base 300x300x375 deep as E10/133
- 3. Bollards to be set back 500mm from face of kerb to centre of bollard

4. Bollards to have a 80mm minimum wide high intensity retroreflective band to BS EN 12899-1:2007

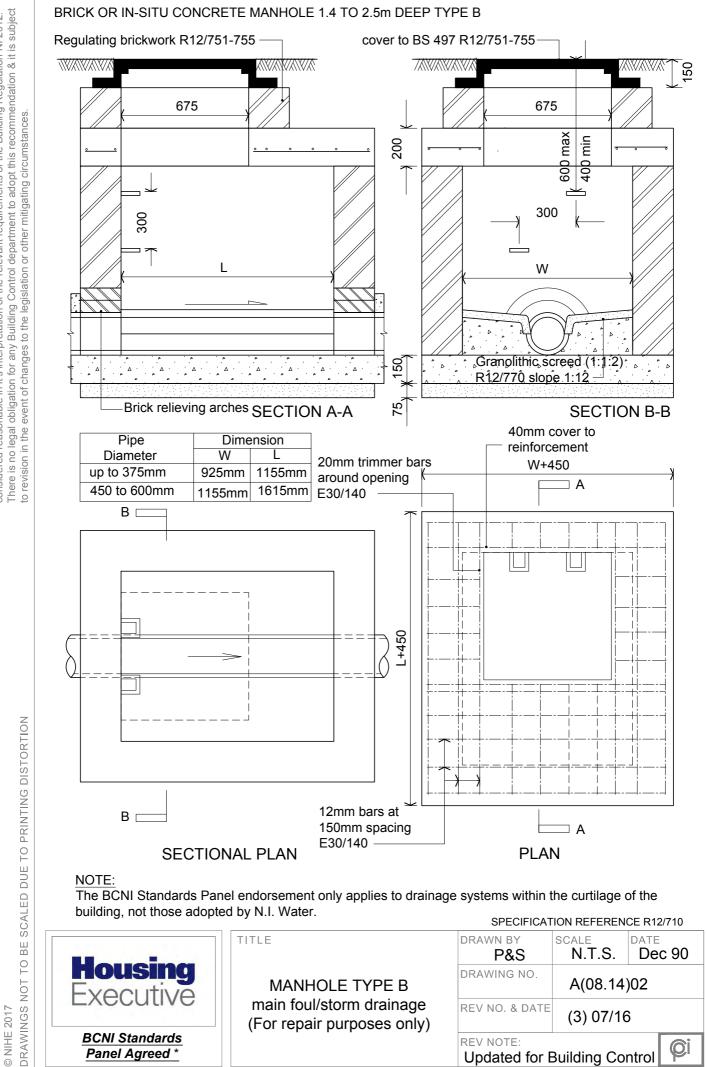
		TITLE	DRAWN BY	scale 1:10	DATE Sep	ot 12
	Housing	FOOTPATH BOLLARD	DRAWING NO.	A(08.13)2	27	
- 09 20	Executive		REV NO. & DATE			
			REV NOTE:			Юi

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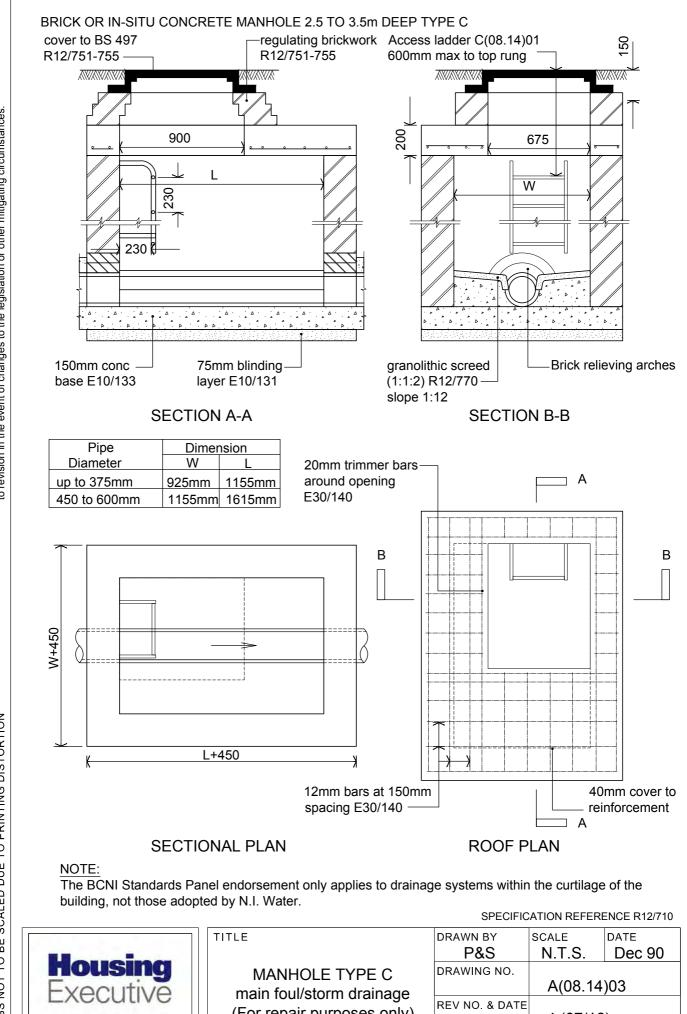


DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION © NIHE 2017

Sananig, not inoco daoptoo	,	SPECIFICATION REFERENCE R12/710				
<b>Housing</b> Executive	MANHOLE TYPE A main foul/storm drainage (For repair purposes only)	drawn by <b>P&amp;S</b>	scale N.T.S.	date Dec 90		
		DRAWING NO.	A(08.14)01			
		REV NO. & DATE	(2) 07/16			
BCNI Standards Panel Agreed *		REV NOTE: Updated for Building Control				



There is no legal obligation for any Building Control department to adopt this recommendation & it is subject This NIHE produced detail has been examined by The Building Control N.I. Standards Panel and has been considered reasonable in it's interpretation of the relevant requirements of the Building Regulation NI 2012.

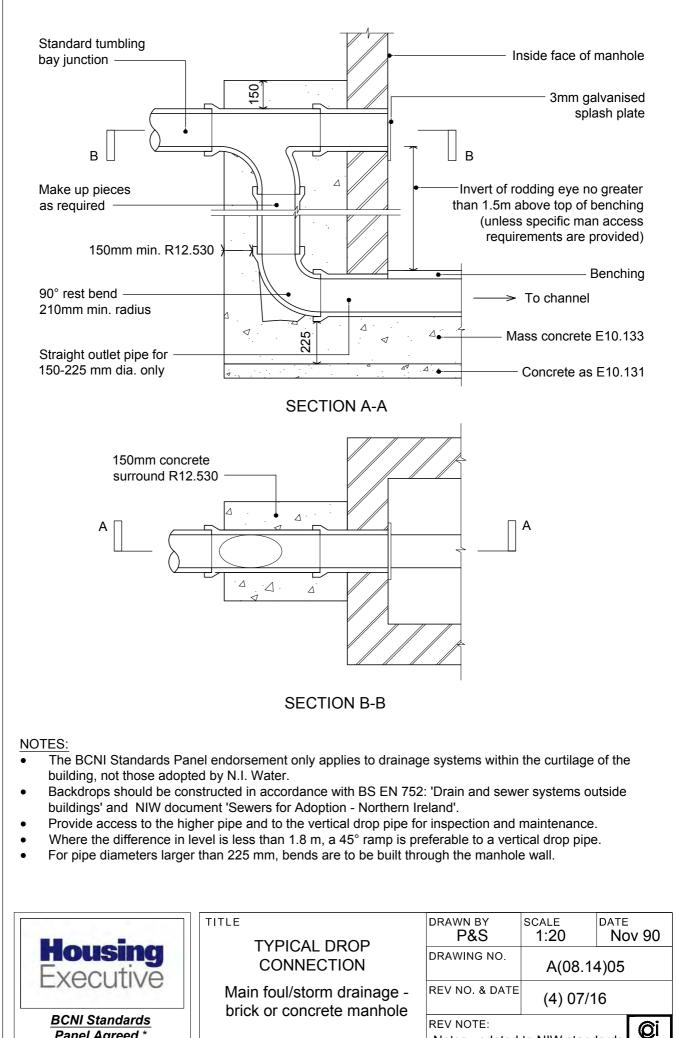


This NIHE produced detail has been examined by The Building Control N.I. Standards Panel and has been considered reasonable in it's interpretation of the relevant requirements of the Building Regulation NI 2012. There is no legal obligation for any Building Control department to adopt this recommendation & it is subject to revision in the event of changes to the legislation or other mitigating circumstances.

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building, not those adopt	ted by N.I. Water.	SPECIFIC	CATION REFER	ENCE R12/710	
	TITLE	drawn by P&S	scale N.T.S.	DATE Dec 90	
<b>lousing</b> Executive	MANHOLE TYPE C main foul/storm drainage (For repair purposes only)	DRAWING NO.	A(08.14)03		
		REV NO. & DATE	4 (07/16)		
BCNI Standards Panel Agreed *		REV NOTE: Updated for I	Building Control		

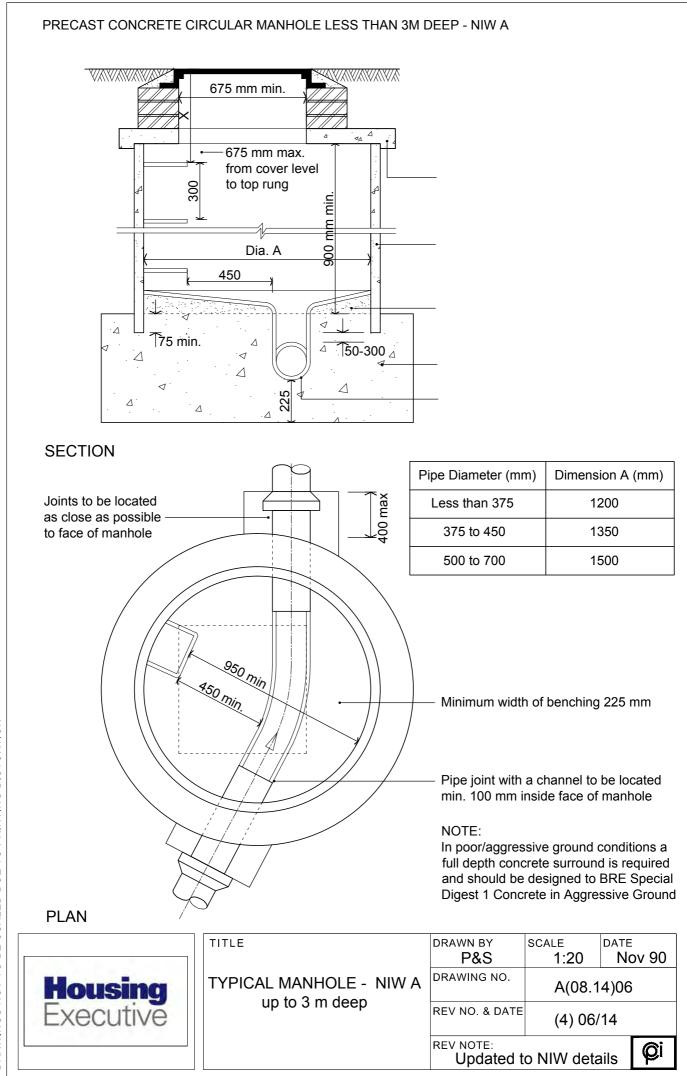
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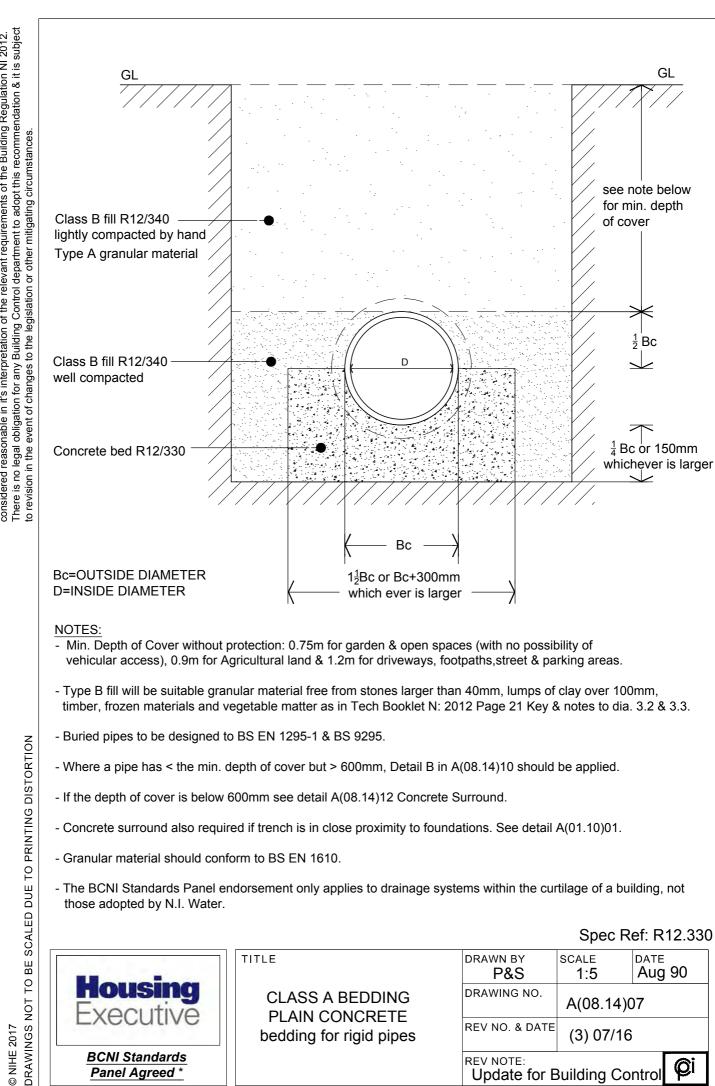


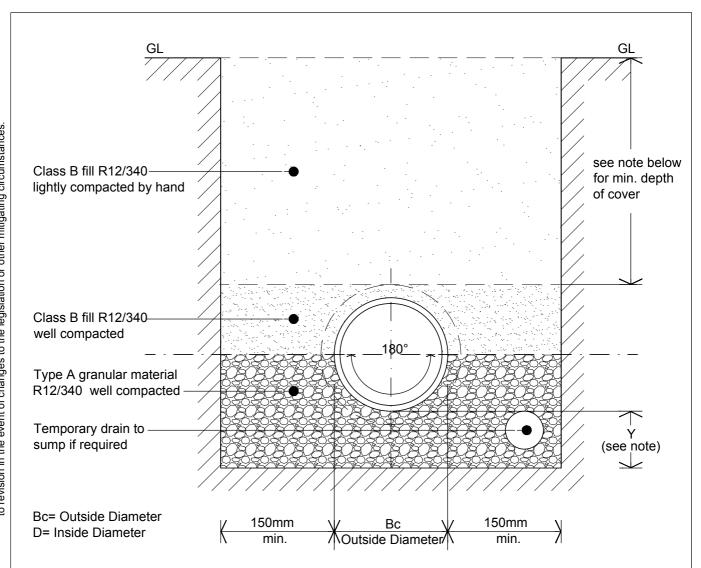
Notes updated to NIW standards

DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION © NIHE 2017

Panel Agreed '







## NOTES:

- Min. Depth of Cover without protection: 0.75m for garden & open spaces (with no possibility of vehicular access) 0.9m for Agricultural land & 1.2m for driveways, footpaths,street & parking areas.
- Buried pipes to be designed to BS EN 1295-1 & BS 9295.
- Type B granular material to be free from stones larger than 40mm, lumps of clay over 100mm, timber, frozen materials and vegetable matter, as in Tech Booklet N: 2012 Pg. 21, dia. 3.2 and 3.3.
- Where a pipe has < the min. depth of cover but > 600mm, Detail B in A(08.14)10 should be applied.
- If the depth of cover is below 600mm see detail A(08.14)12 Concrete Surround.
- Concrete surround also required if trench is in close proximity to foundations. See detail A(01.10)01.
- The BCNI Standards Panel endorsement only applies to drainage systems within the curtilage of a building, not those adopted by N.I. Water.

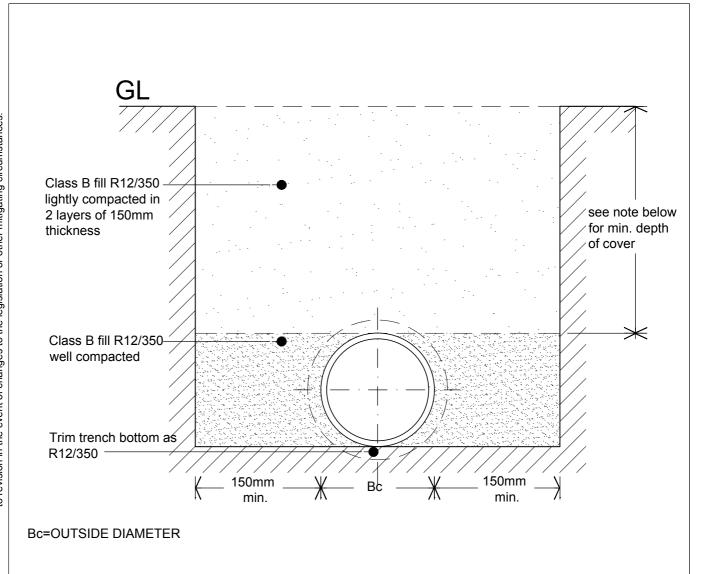
## DIMENSION Y:

- For Trenches in rock or mixed soils containing rock bands, boulders, large flints or stones or other irregular hard spots,  $Y = \frac{1}{4}$  Bc or 200mm (whichever is the greater) under the barrels, but not less than 200mm under the sockets.
- For trenches in uniform soils  $Y = \frac{1}{6}$  Bc or 100mm (whichever is the greater) under the barrels, but not less than 50mm under the sockets.

Spec Ref: R12.340

	TITLE	drawn by P&S	scale 1:5		g 90
Housing Executive	CLASS B BEDDING main foul/storm drainage bedding for rigid pipes	DRAWING NO.	A(08.14)	)08	
		REV NO. & DATE	(3) 07/16	6	
BCNI Standards Panel Agreed *		REV NOTE: Updated for E	Building Con	trol	Øi

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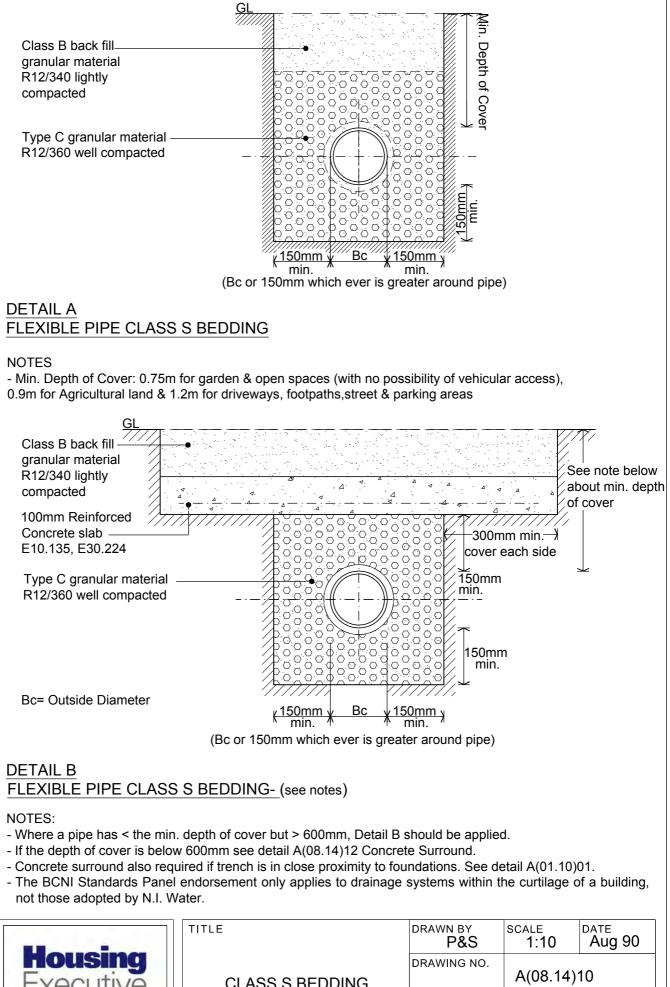
## NOTES-

- Min. Depth of Cover without protection: 0.75m for garden & open spaces (with no possibility of vehicular access), 0.9m for Agricultural land & 1.2m for driveways, footpaths,street & parking areas.
- Type B granular material to be free from stones larger than 40mm, lumps of clay over 100mm, timber, frozen materials and vegetable matter, as in Tech Booklet N: 2012 Pg. 21, dia. 3.2 and 3.3.
- Buried pipes to be designed to BS EN 1295-1 & BS 9295.
- Where a pipe has < the min. depth of cover but > 600mm, Detail B in A(08.14)10 should be applied.
- If the depth of cover is below 600mm see detail A(08.14)12 Concrete Surround.
- Concrete surround also required if trench is in close proximity to foundations. See detail A(01.10)01.
- The BCNI Standards Panel endorsement only applies to drainage systems within the curtilage of a building, not those adopted by N.I. Water.

Spec Ref: R12.350

) BE SC		TITLE	DRAWN BY	SCALE 1:5	DATE Aug	g 90
NOT TO	<b>Housing</b> Executive	CLASS D NATURAL BEDDING main foul/storm drainage bedding for rigid pipes	DRAWING NO.	A(08.14)	09	
			REV NO. & DATE	(3) 07/16	6	
DRAWINGS	BCNI Standards Panel Agreed *		REV NOTE: Updated for B	Building Cont	trol	<b>p</b> i

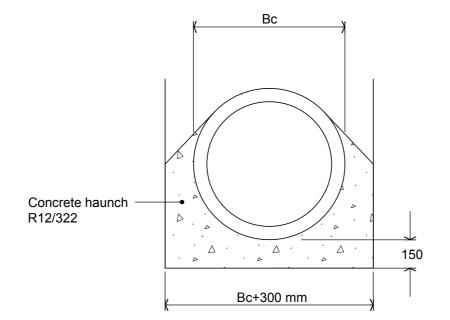
There is no legal obligation for any Building Control department to adopt this recommendation & it is subject to revision in the event of changes to the legislation or other mitigating circumstances. This NIHE produced detail has been examined by The Building Control N.I. Standards Panel and has been considered reasonable in it's interpretation of the relevant requirements of the Building Regulation NI 2012. compacted DETAIL A NOTES compacted



DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION © NIHE 2017

	TITLE	drawn by <b>P&amp;S</b>	scale 1:10	DATE Aug 9	0
Housing Executive	CLASS S BEDDING main foul/storm drainage	DRAWING NO.	A(08.14)10		
LXECULIVE		REV NO. & DATE	(5) 07/16		
BCNI Standards Panel Agreed *	flexible pipes	REV NOTE: Updated for I	building Con	itrol 🕻	<u>)</u> i

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NOTES:

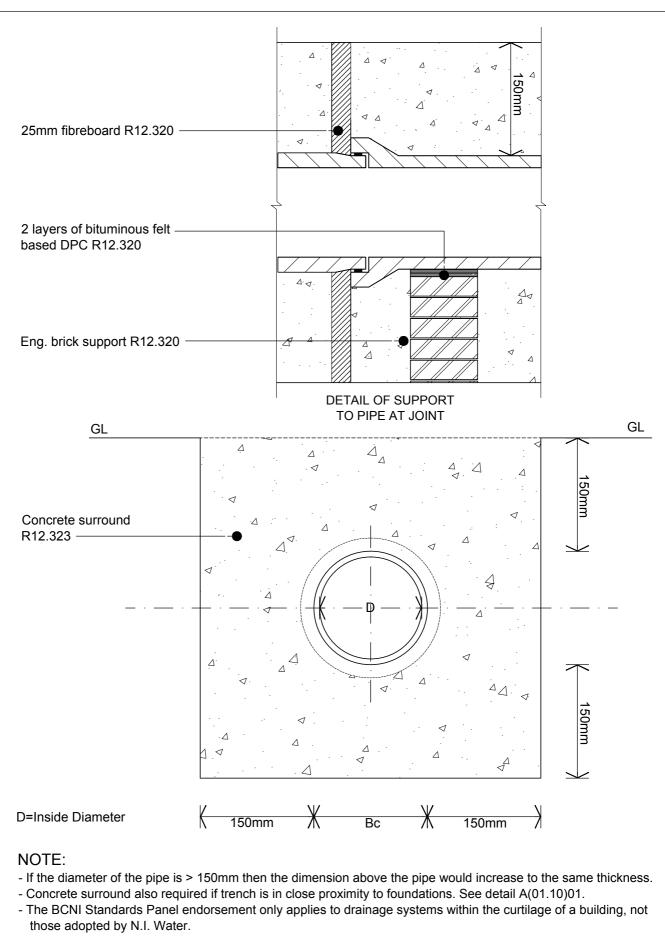
- The BCNI Standards Panel endorsement only applies to drainage systems within the curtilage of a building, not those adopted by N.I. Water. - Bc = OUTSIDE DIAMETER.

- For pipe jointing detail see drawing no. A(08.14)12.
  Concrete surround also required if trench is in close proximity to foundations. See detail A(01.10)01.

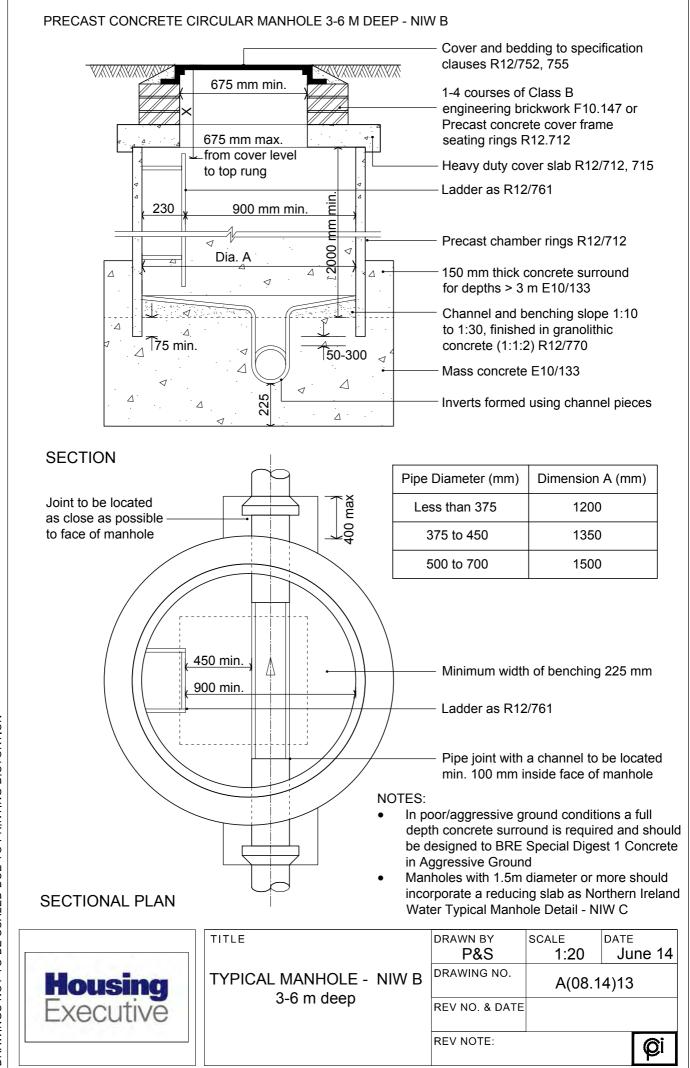
O BE S		TITLE	drawn by P&S	scale 1:20	date Aug 90
WINGS NOT TO	<b>Housing</b> Executive	CONCRETE BED AND HAUNCH main foul/storm drainage	DRAWING NO.	A(08.14)	)11
			REV NO. & DATE	(3) 07/16	3
DKAW			REV NOTE: Updated for Building Control		

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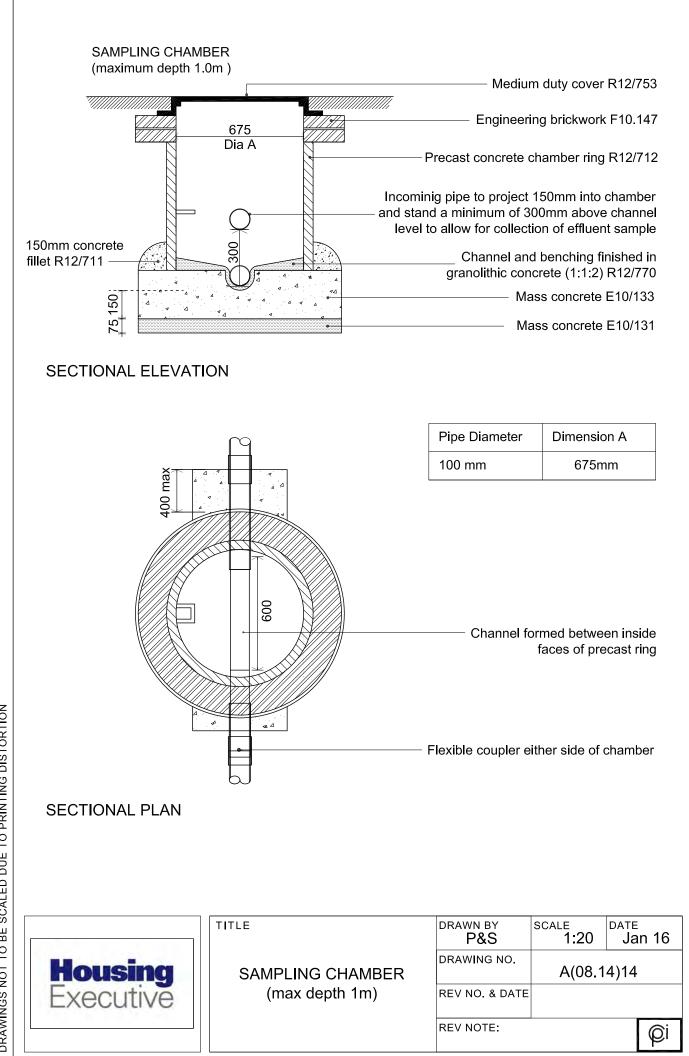
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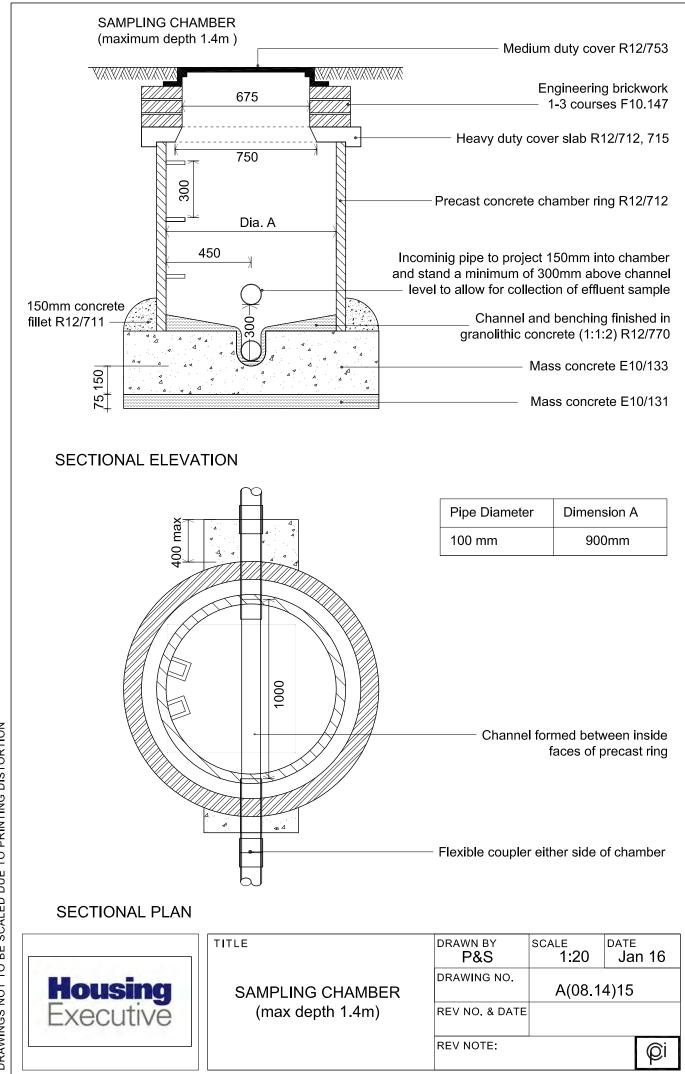


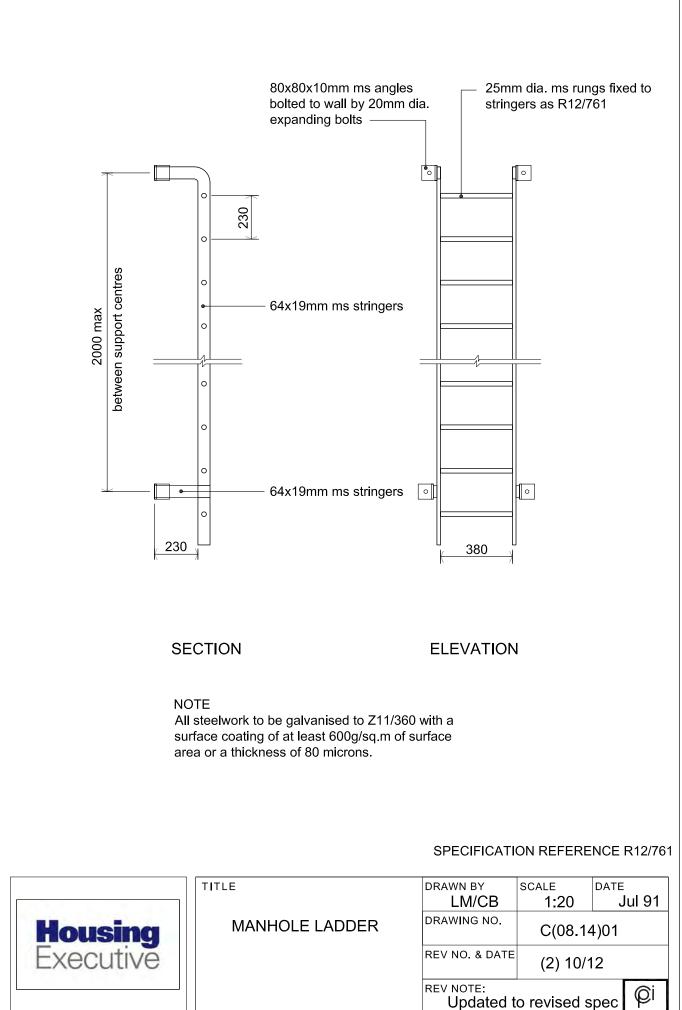
	TITLE	drawn by P&S	scale 1:5	date Aug 90
Housing Executive	& JOINT DETAIL main foul/storm drainage for rigid pipes	DRAWING NO.	A(08.1	4)12
LACCULIVE		REV NO. & DATE	E (3) 07/16	
BCNI Standards Panel Agreed *		REV NOTE: Updated for	Building Cor	ntrol <b>©i</b>

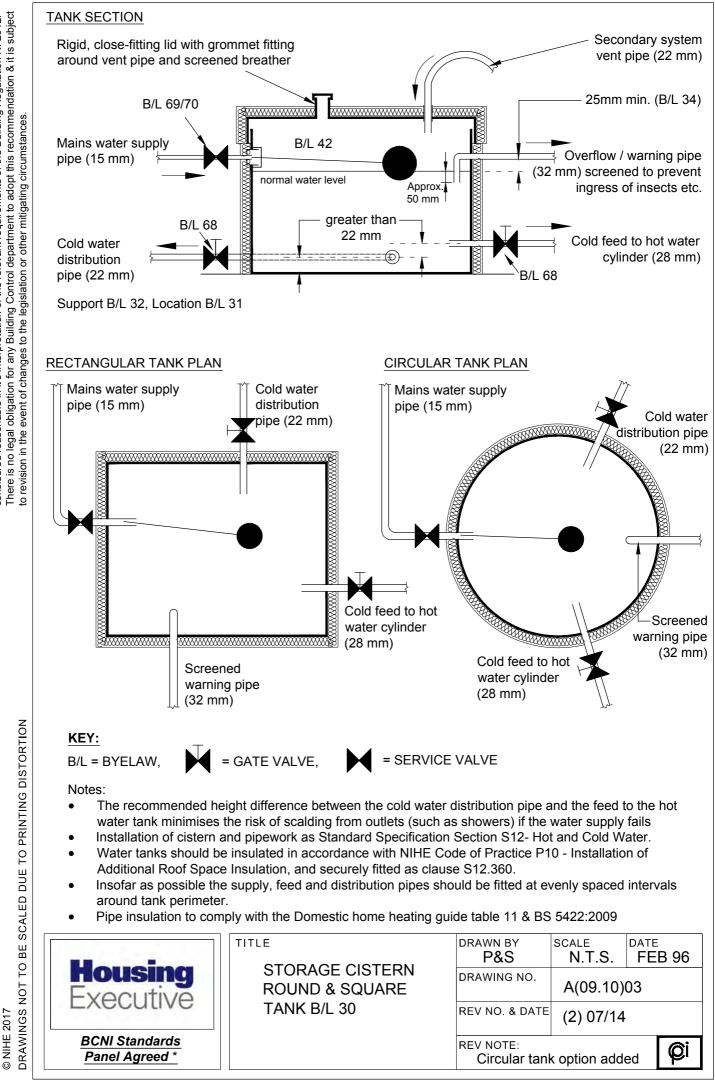


SCALED DUE TO PRINTING DISTORTION DRAWINGS NOT TO BE



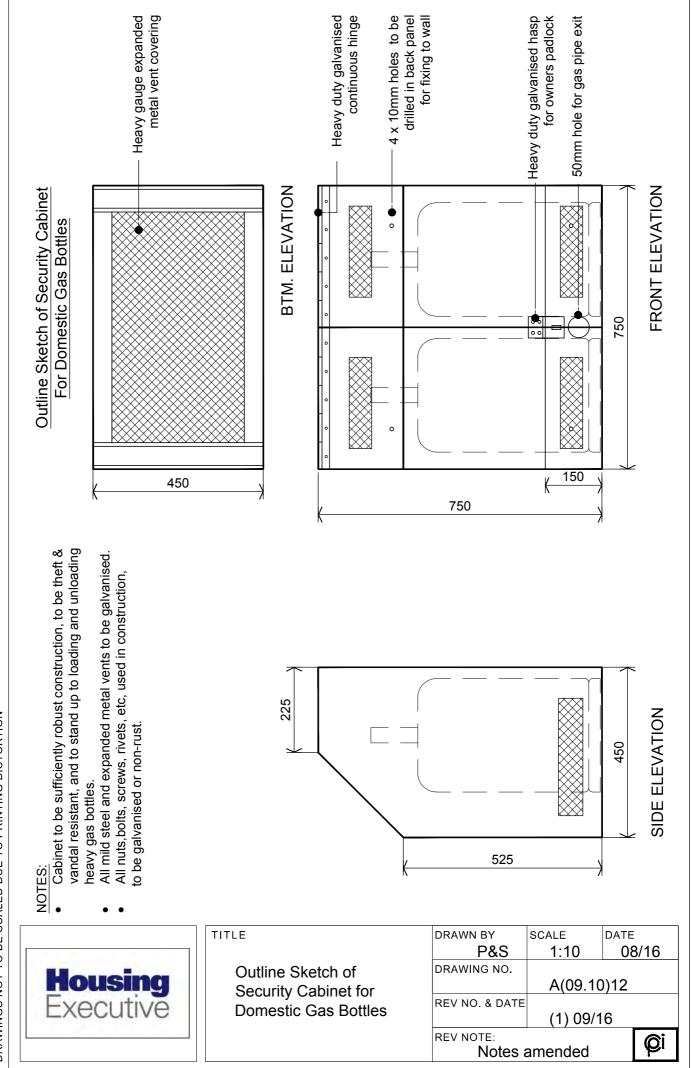


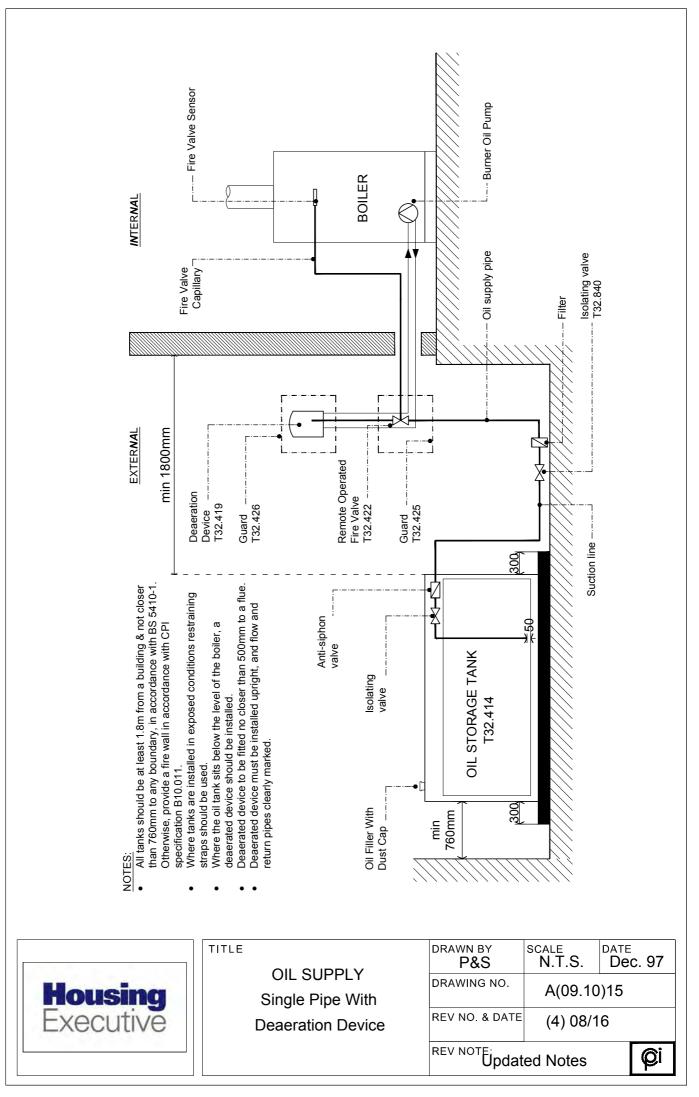


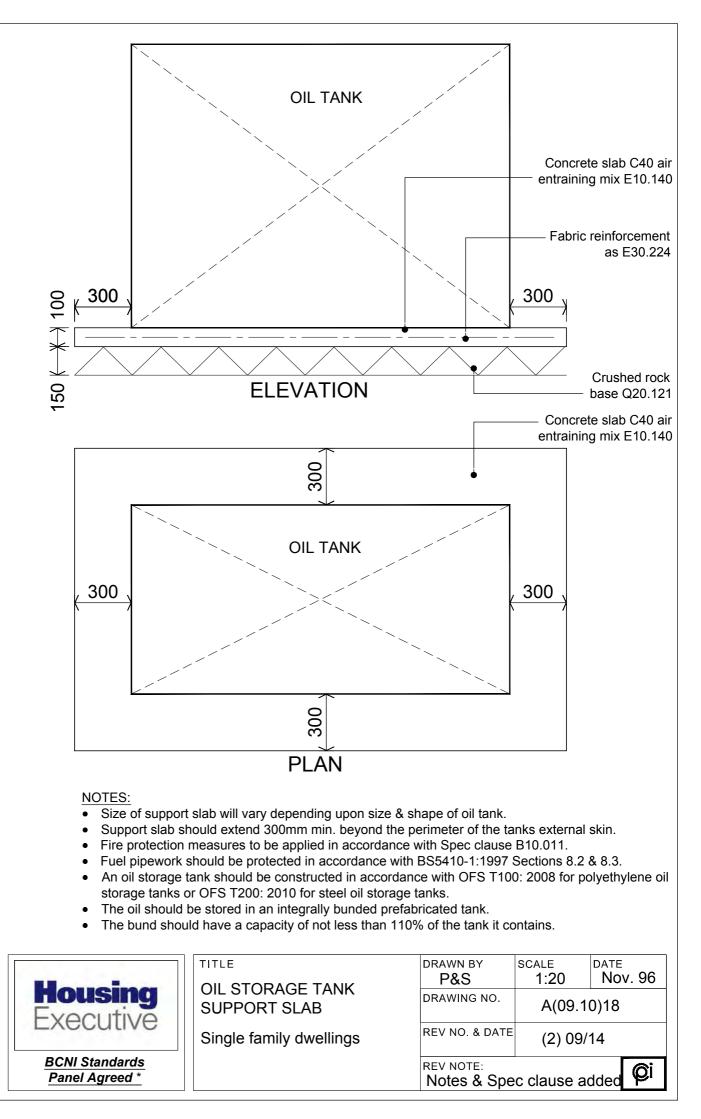


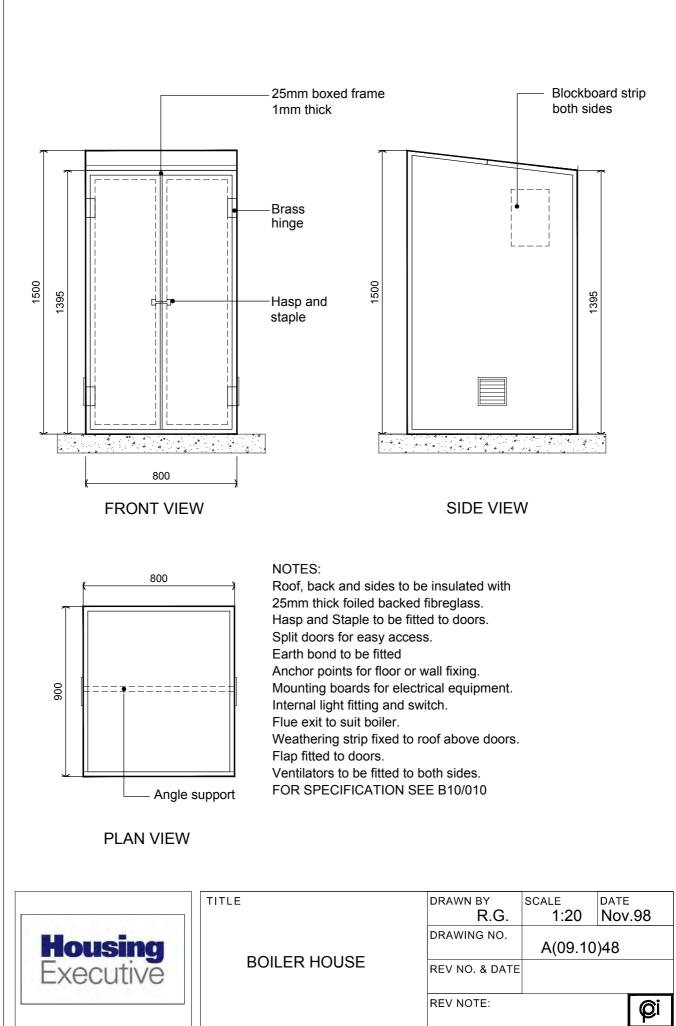
This NIHE produced detail has been examined by The Building Control N.I. Standards Panel and has been considered reasonable in it's interpretation of the relevant requirements of the Building Regulation NI 2012. There is no legal obligation for any Building Control department to adopt this recommendation & it is subject to adopt the subject to

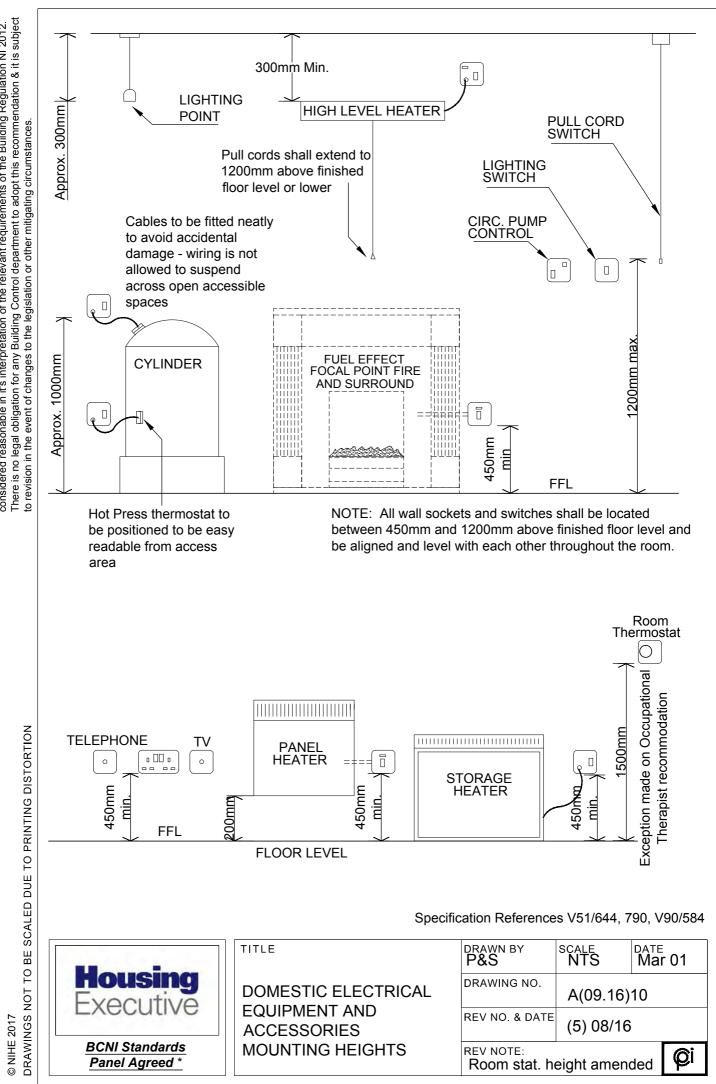
Cooker The installer shall, on completion, provide a landlords' Gas Safety Record (CP12) certificate that he installation has been completed and tested in accordance with BS 5482-1:2005 as S33/642 ၜ പ്ര All work on LPG installations must be carried out by a registered Gas Safe installer. All copper pipework shall be 15mm plastic covered and colour coded yellow ochre. -PG pipes shall be cross bonded in accordance with IET Wiring Regulations. 2. PROPANE HIGH PRESSURE REGULATOR (SINGLE STAGE) S33/628 L.P.G. TYPICAL WORK ARRANGEMENT SECURITY CABINET AS S33/630 AND DRAWING NO. A(09.10)12  $(\infty)$ When installing LPG gas appliances and bottles the manufactures' FOR I.P.B.S. SCHEME All testing and purging shall be carried out all as per S33/642. 4. EMERGENCY CONTROL VALVE S33/625 4 Alternative route underground 5. APPLIANCE SHUT OFF VALVE S33/626 nstructions must be adhered to at all times. Gas installation as S33/635 and S33/640 SLEEVE FOR PIPEWORK S33/620 7. GUARD FOR PIPEWORK S33/622 QUICK FIX HOSE S33/627 3. COPPER PIPE S33/620  $(\mathbf{n})$ DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION Cabinet Security Notes:-LPG . ف (-TITLE DRAWN BY SCALE DATE NTS OCT 96 RG/CB DRAWING NO. Housing LPG TYPICAL WORK A(09.10)11 ARRANGEMENT FOR xecutive REV NO. & DATE COOKER INSTALLATIONS (4) 08/16 REV NOTE Øi Note removed





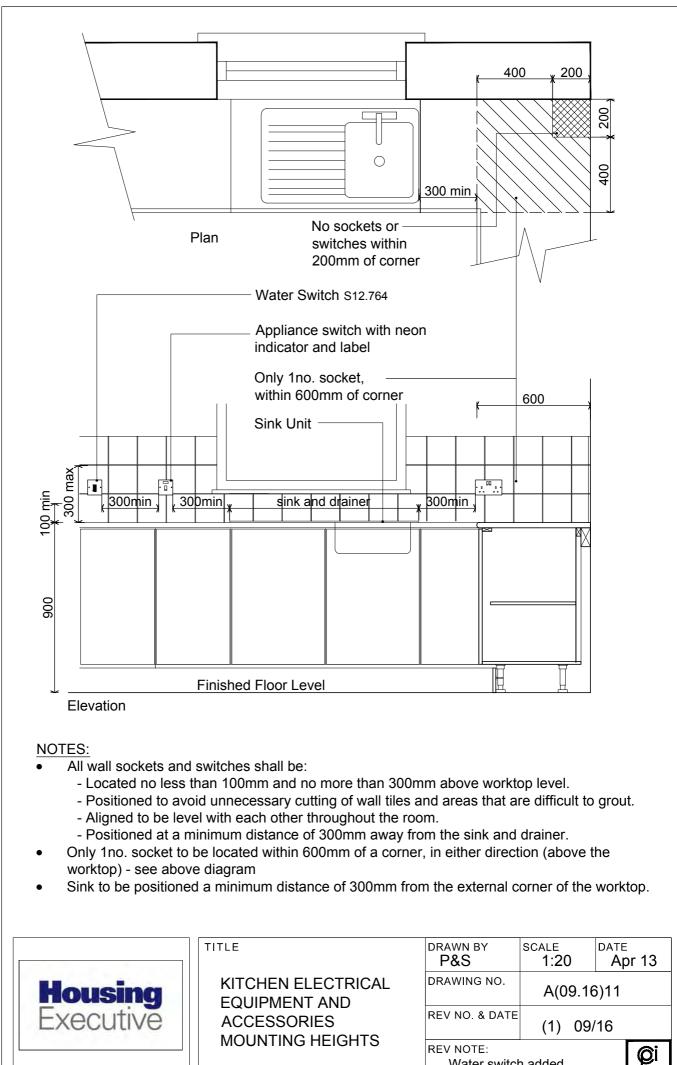




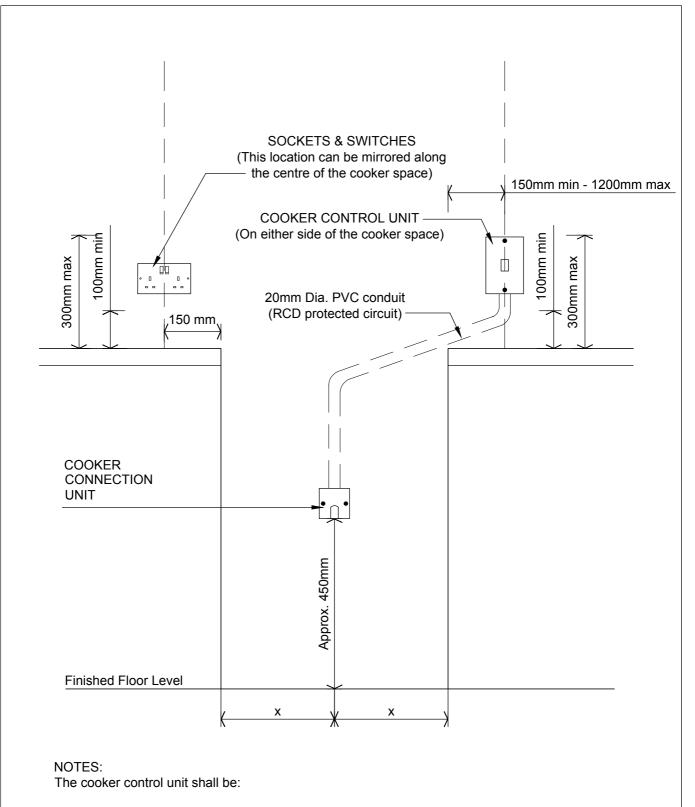


This NIHE produced detail has been examined by The Building Control N.I. Standards Panel and has been considered reasonable in it's interpretation of the relevant requirements of the Building Regulation NI 2012.

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Water switch added

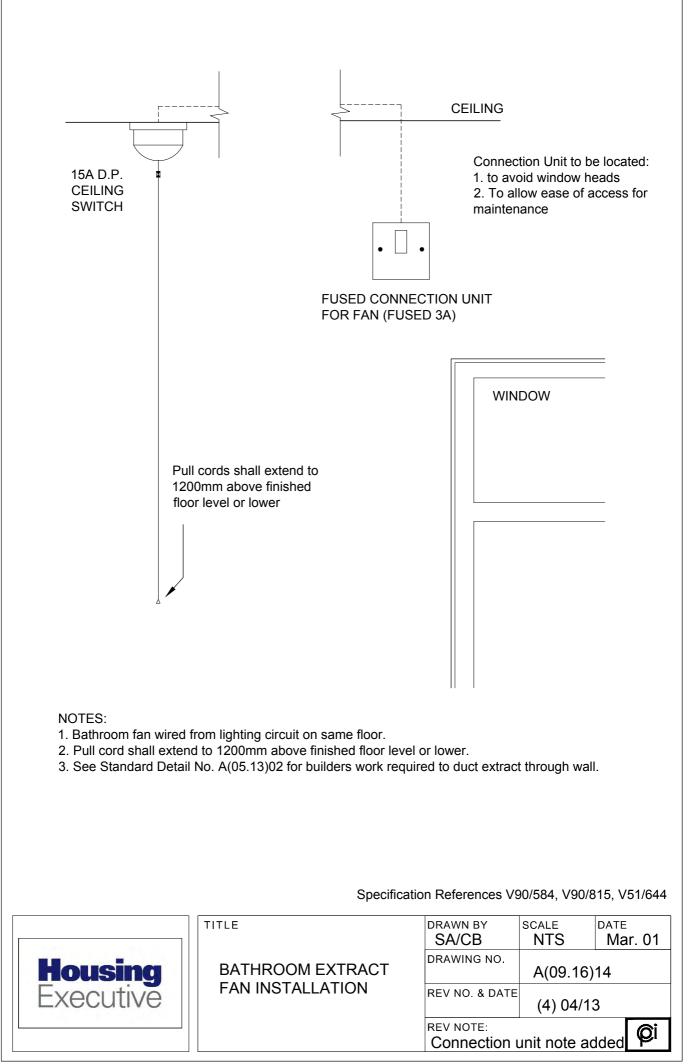


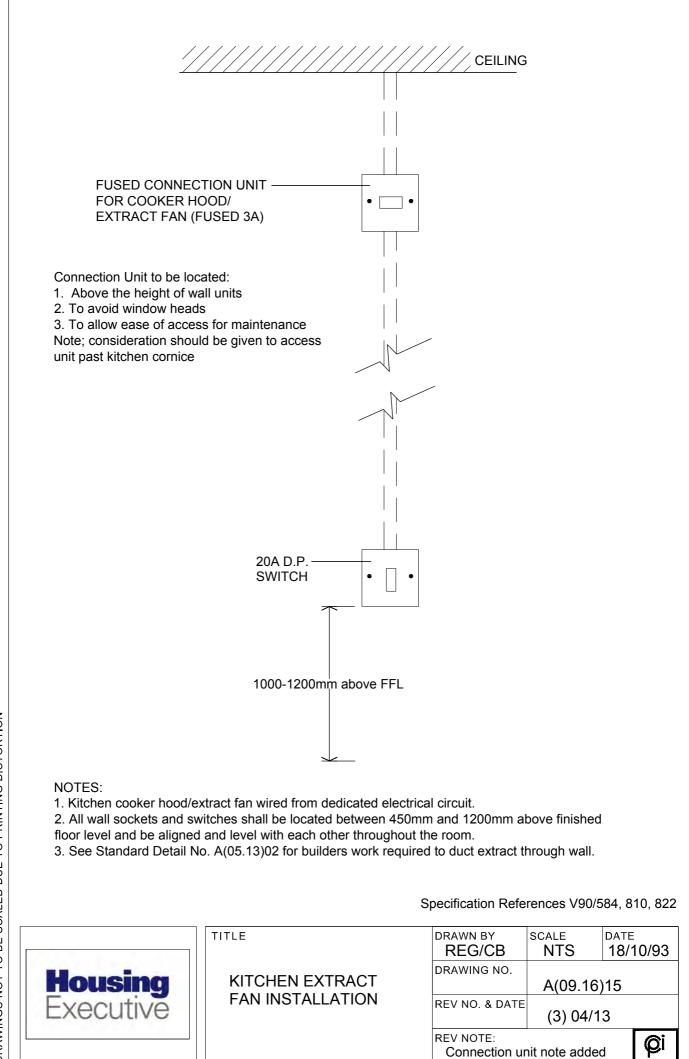
- Positioned vertically no less than 100mm and no more than 300mm above worktop level.
- Positioned horizontally within 150-1200mm from the edge of the cooker space.
- Positioned to avoid unnecessary cutting of wall tiles and areas that are difficult to grout.
- Aligned so that the bottom of the control switch is level with the bottom of other sockets and switches throughout the room.

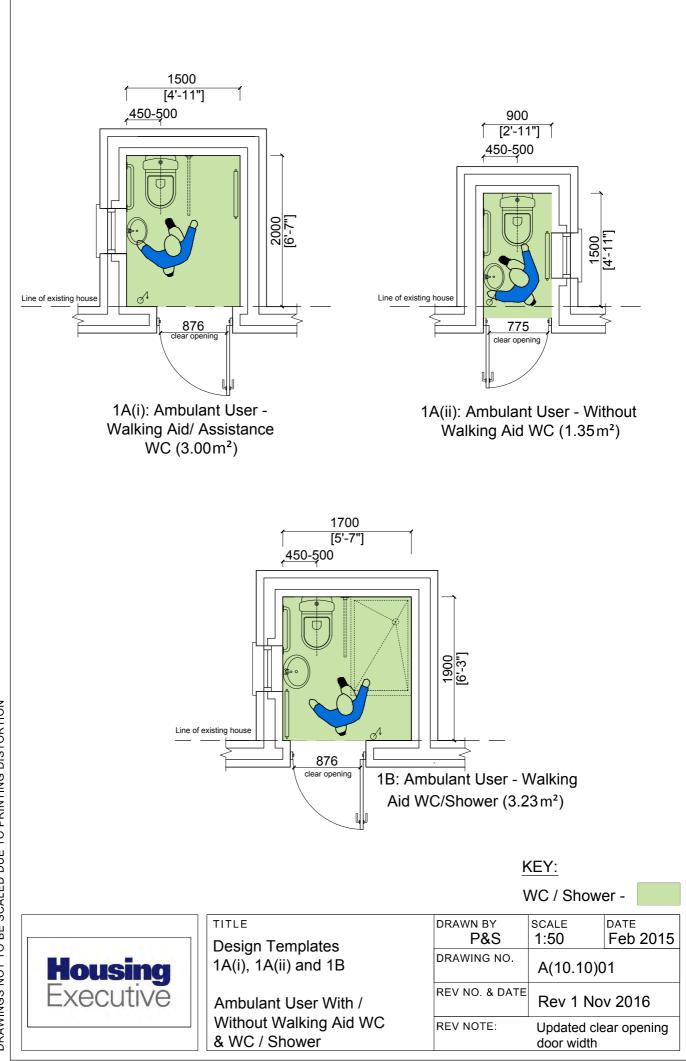
Specification References V90/584, V90/644

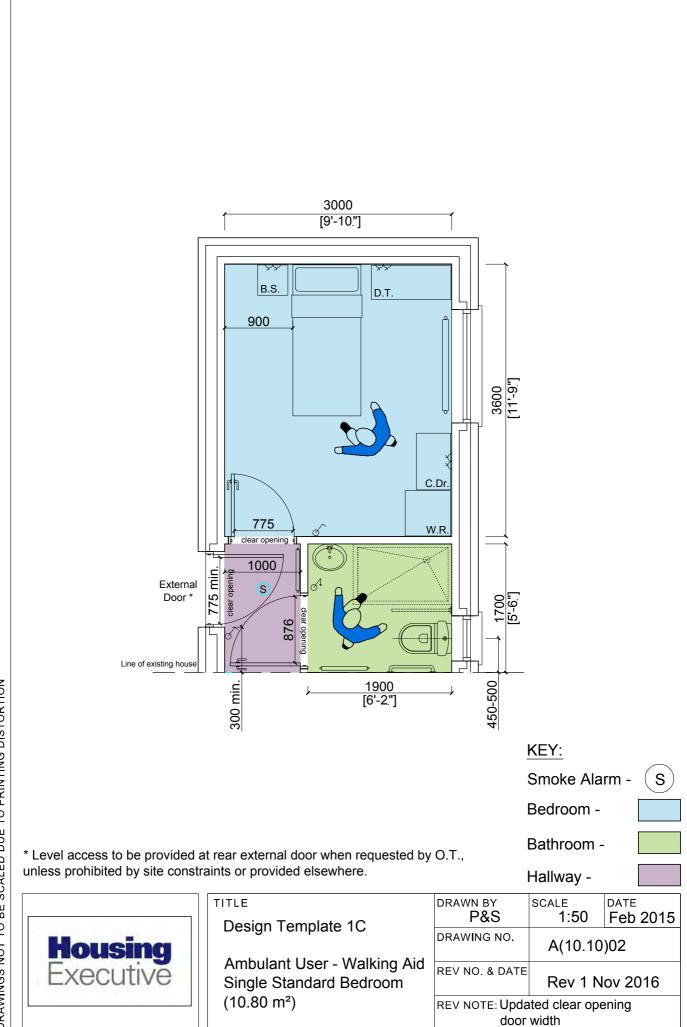


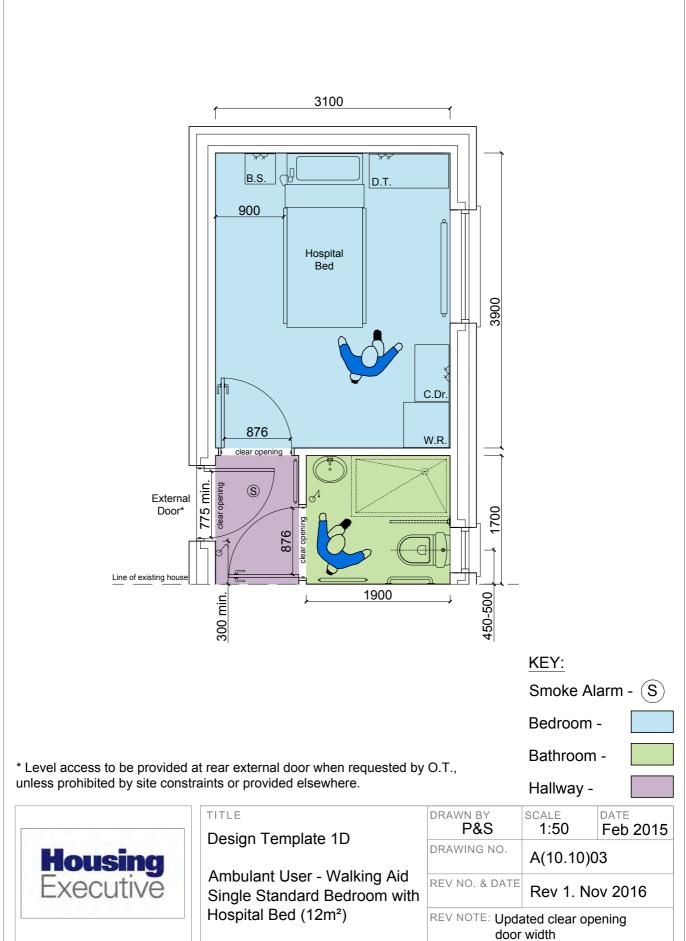
DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION

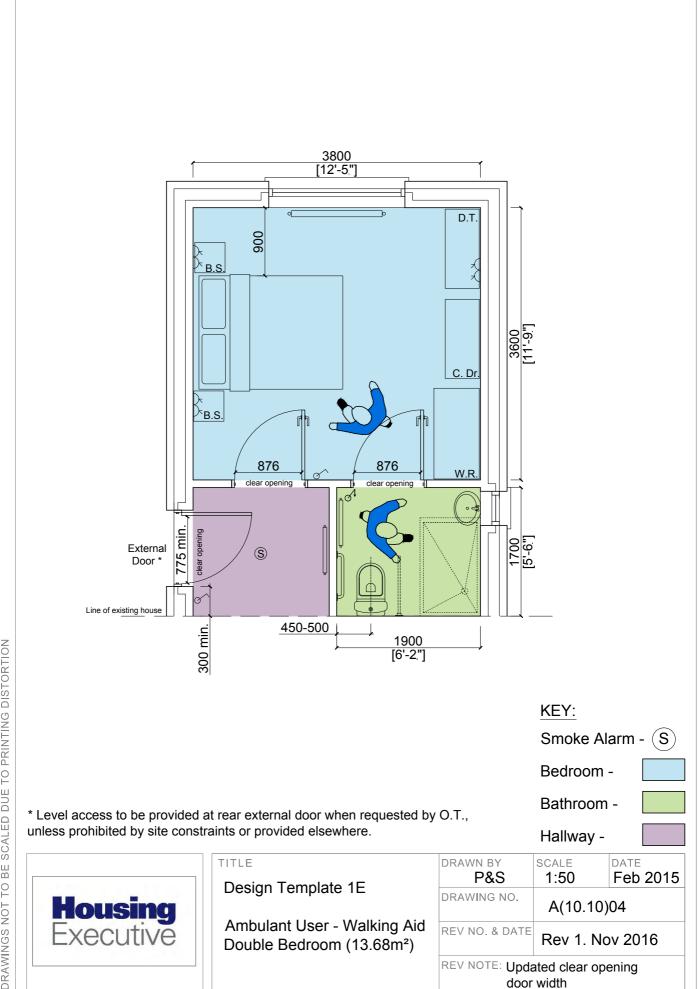


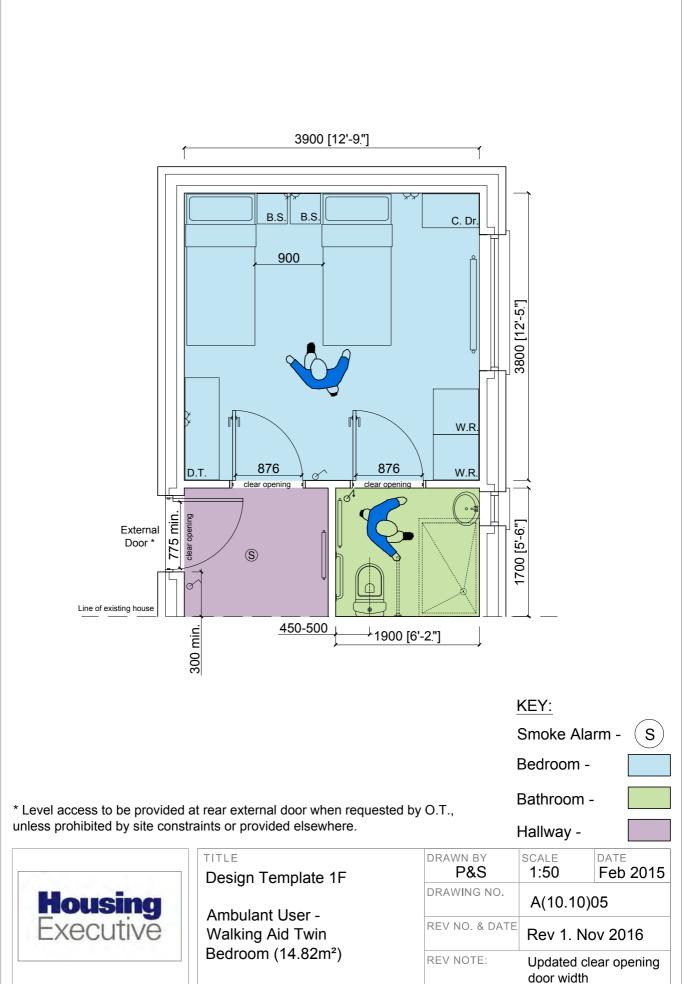


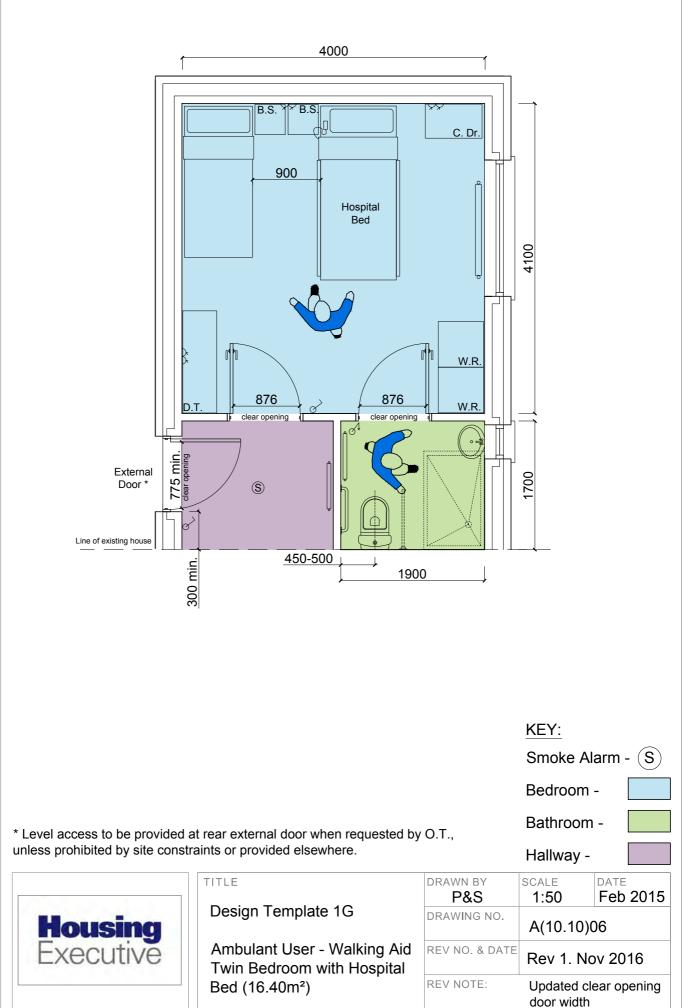




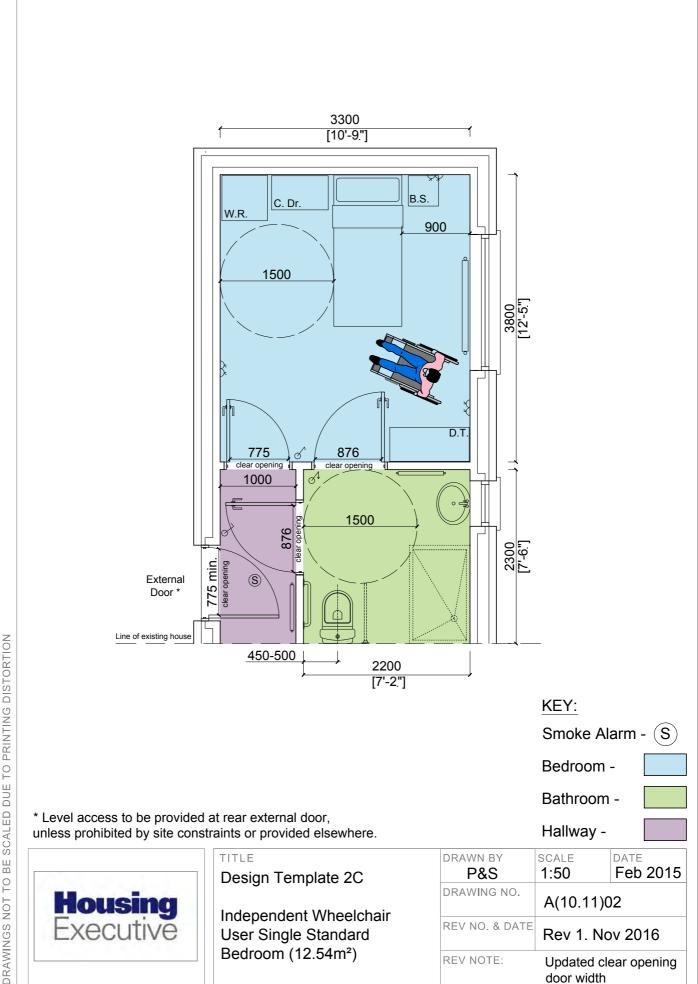


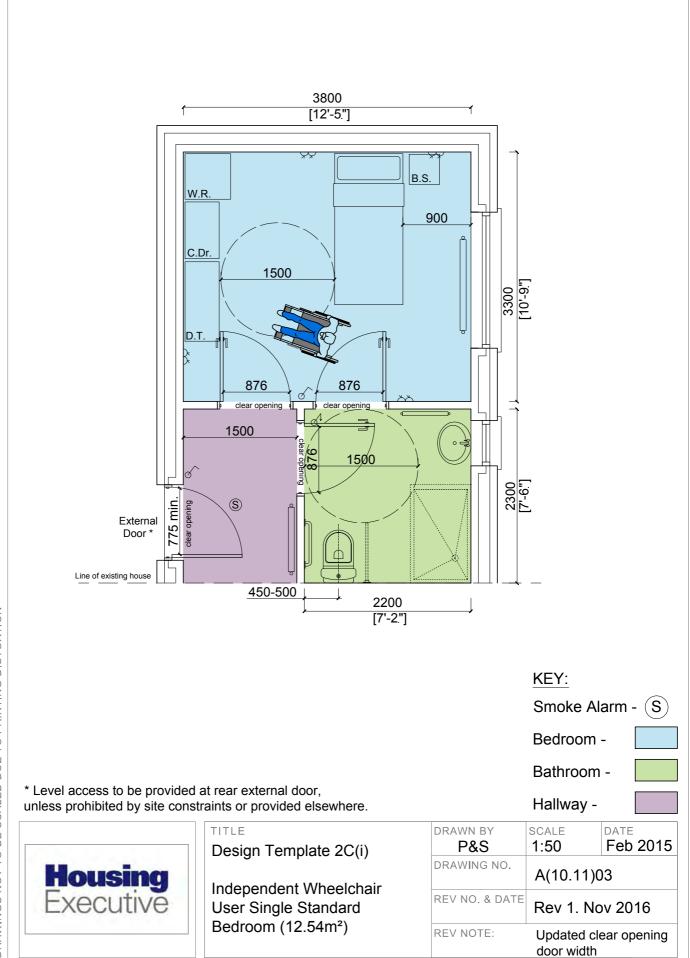


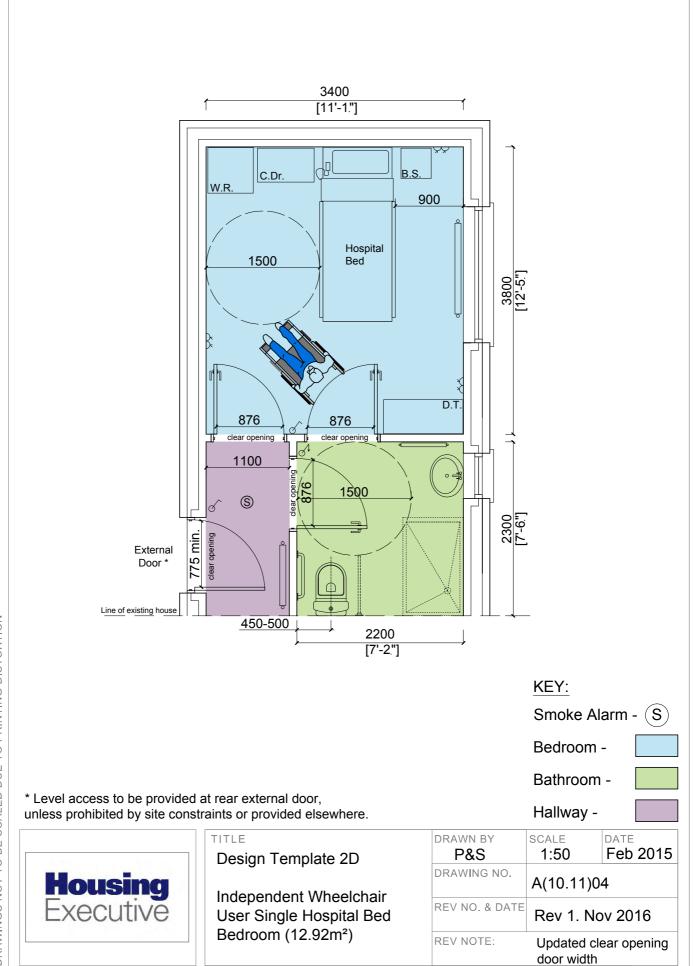


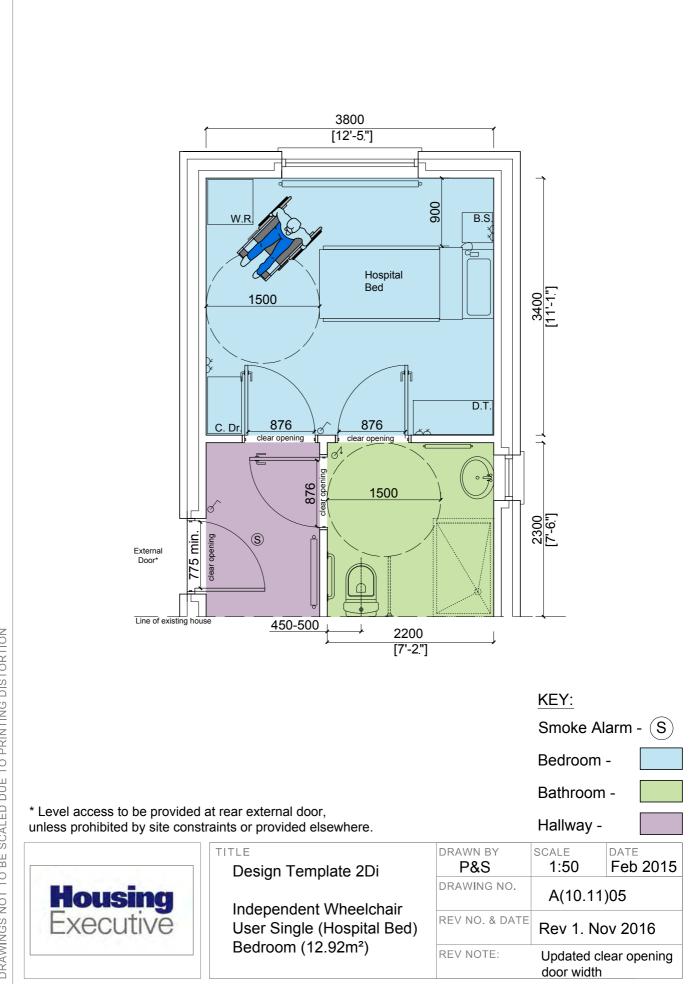


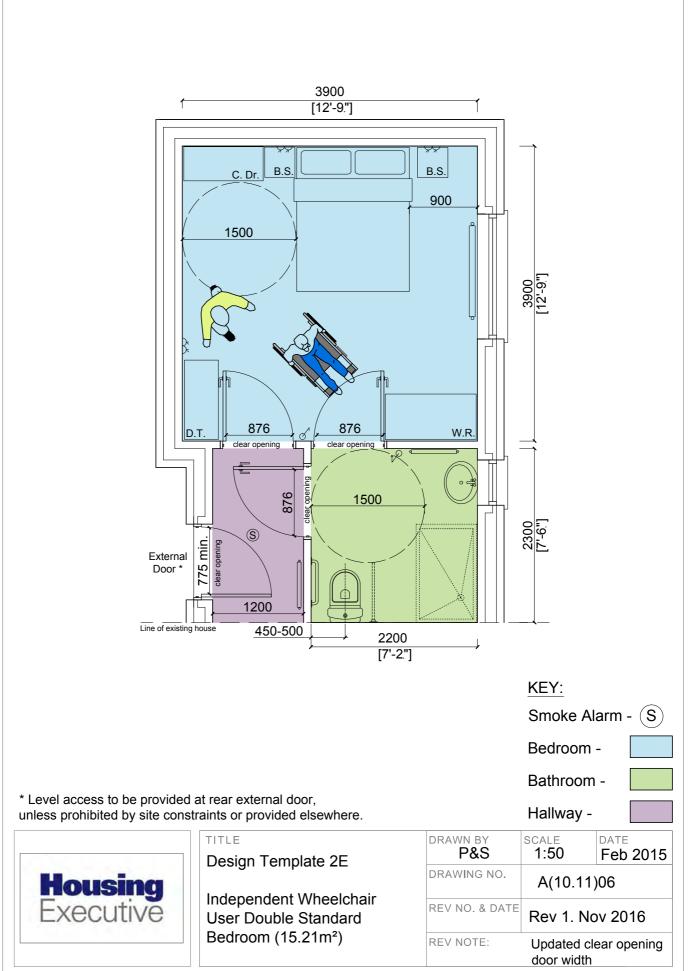


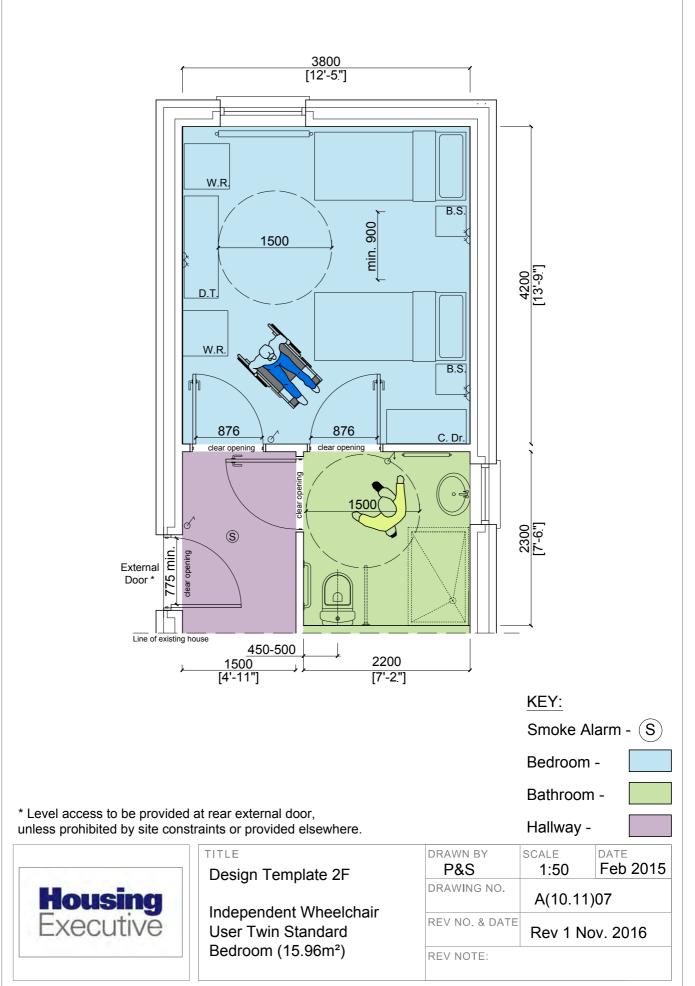


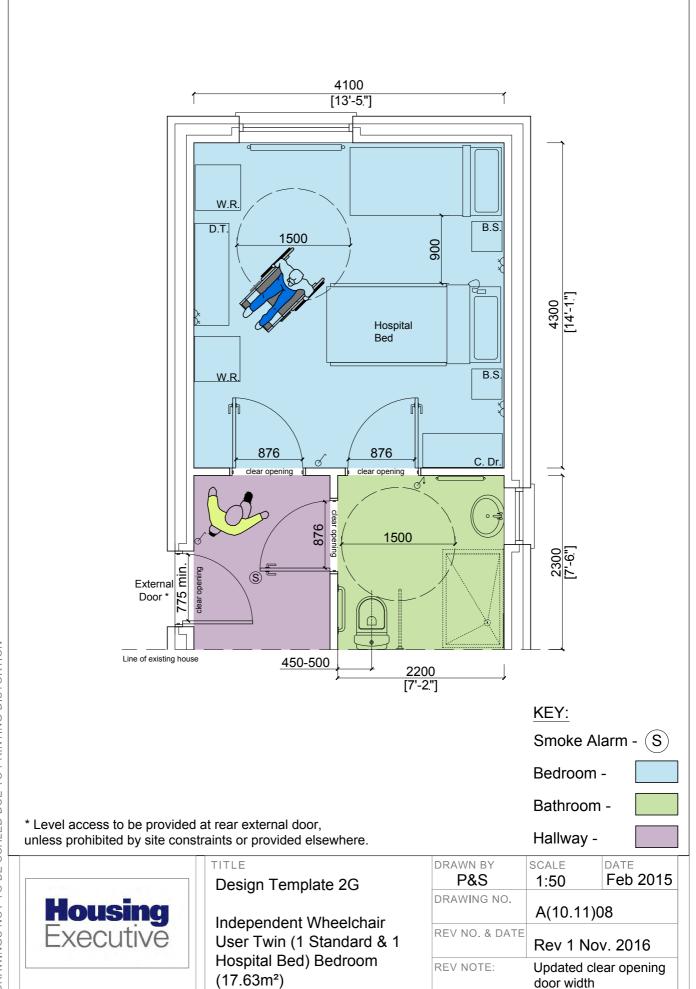


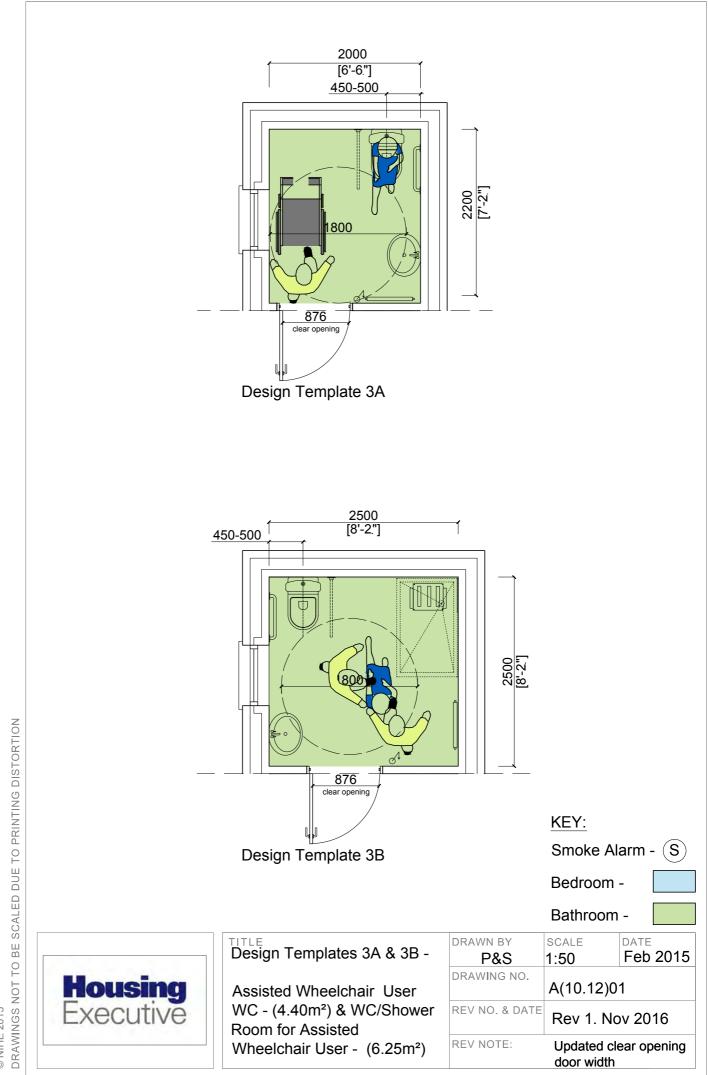


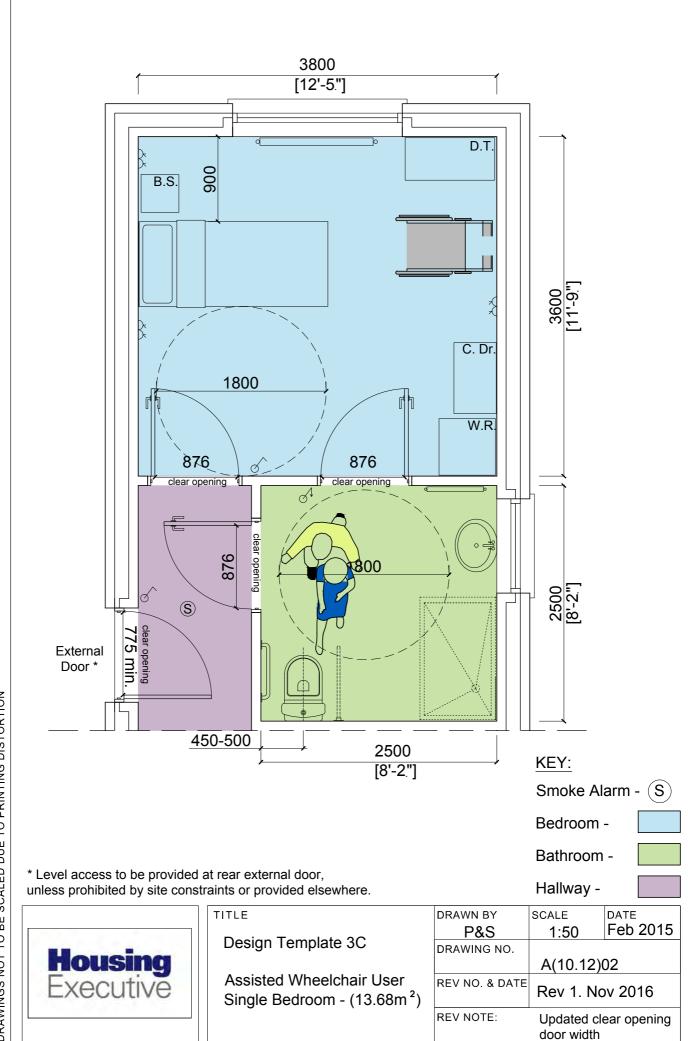


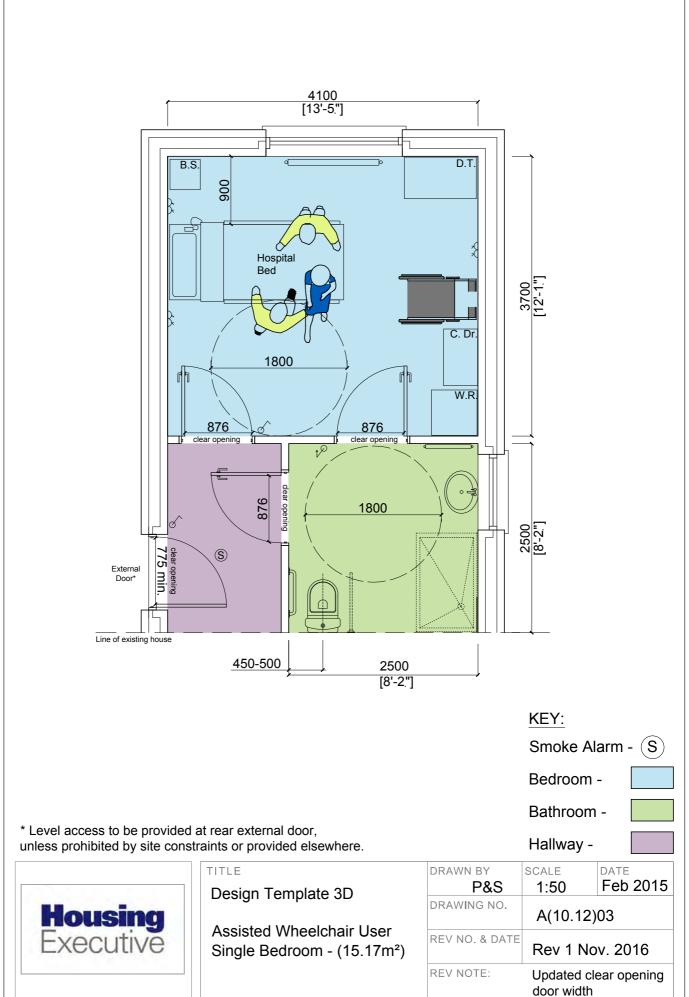


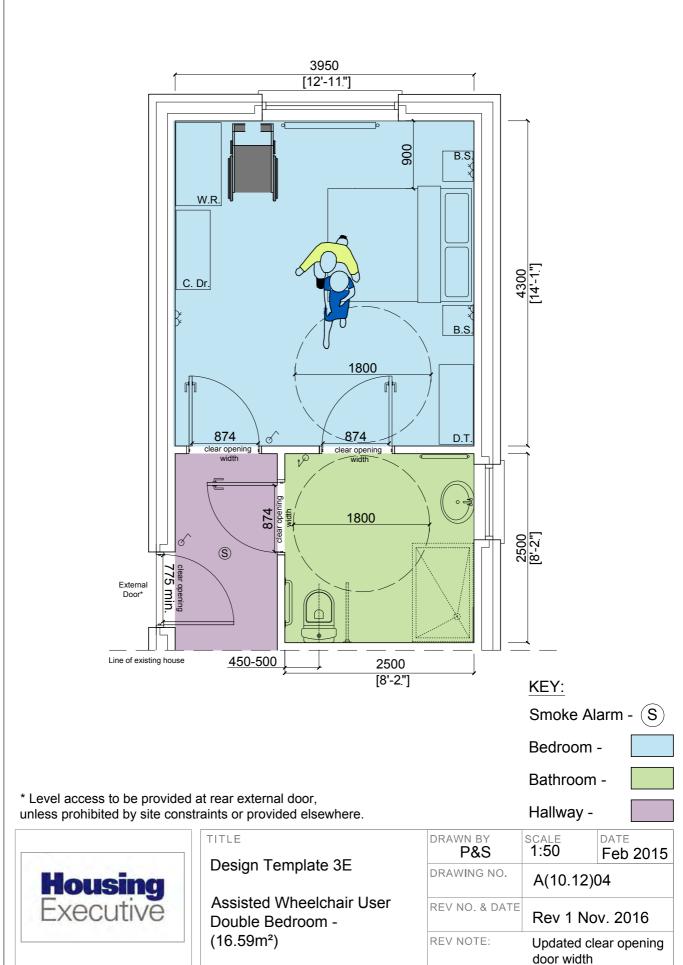


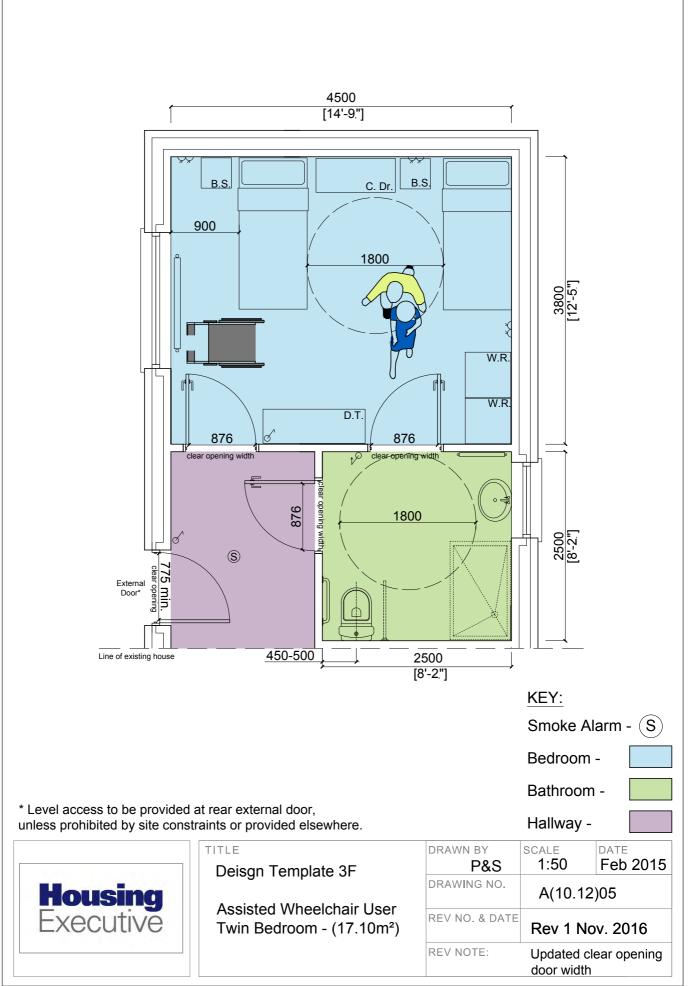


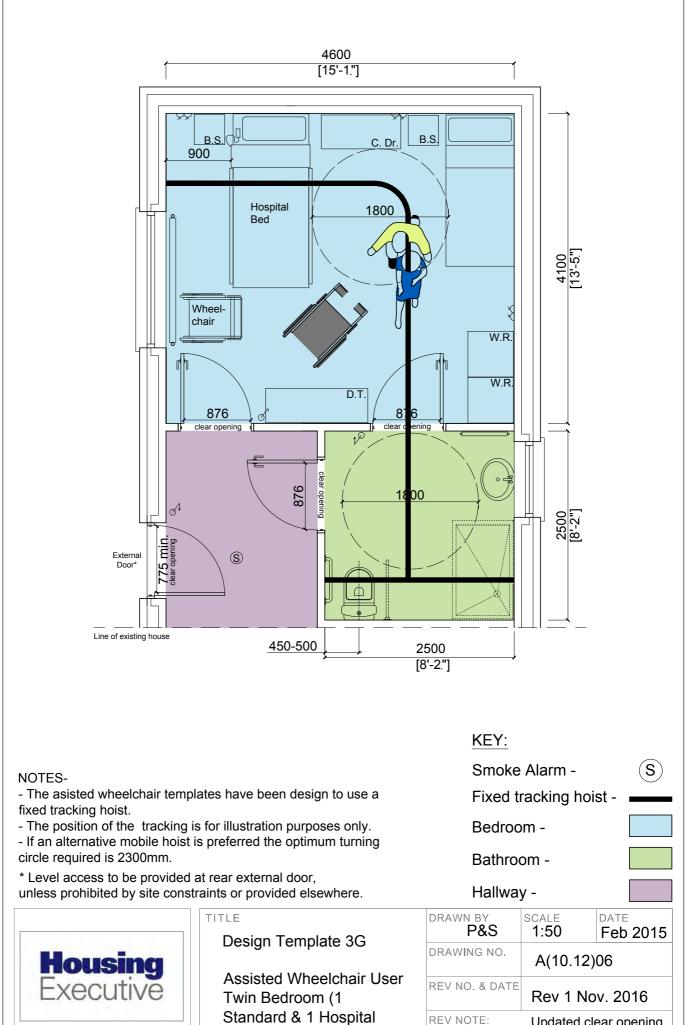












Bed) - (18.86m<sup>2</sup>)

**REV NOTE:** 

Updated clear opening

door width

DRAWINGS NOT TO BE SCALED DUE TO PRINTING DISTORTION

