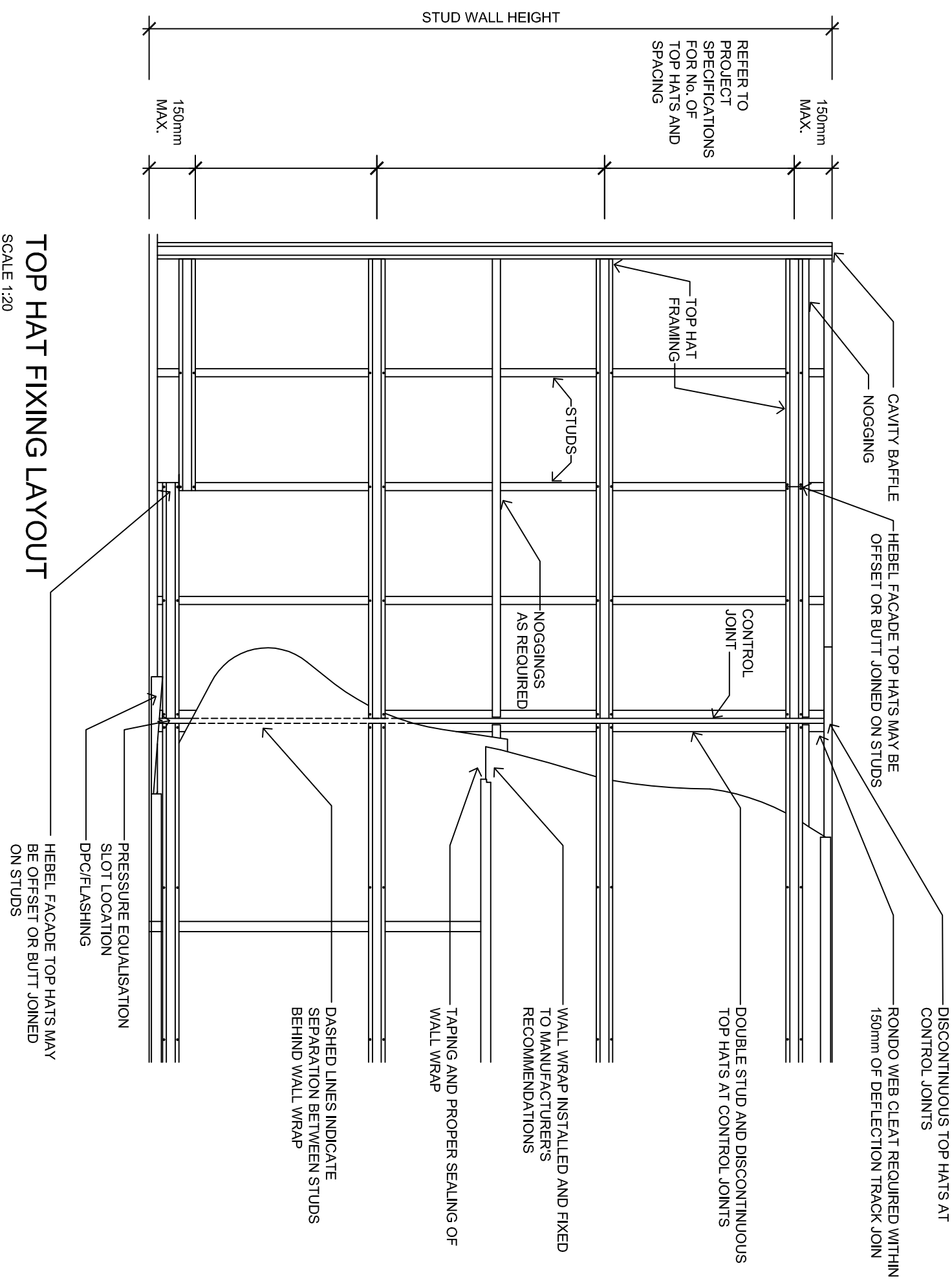


HIGH RISE MULTI-RESIDENTIAL FACADES TYPICAL CONSTRUCTION DETAILS



TOP HAT FIXING LAYOUT



SCALE 1:20

KEY ASSUMPTIONS AND REQUIREMENTS:

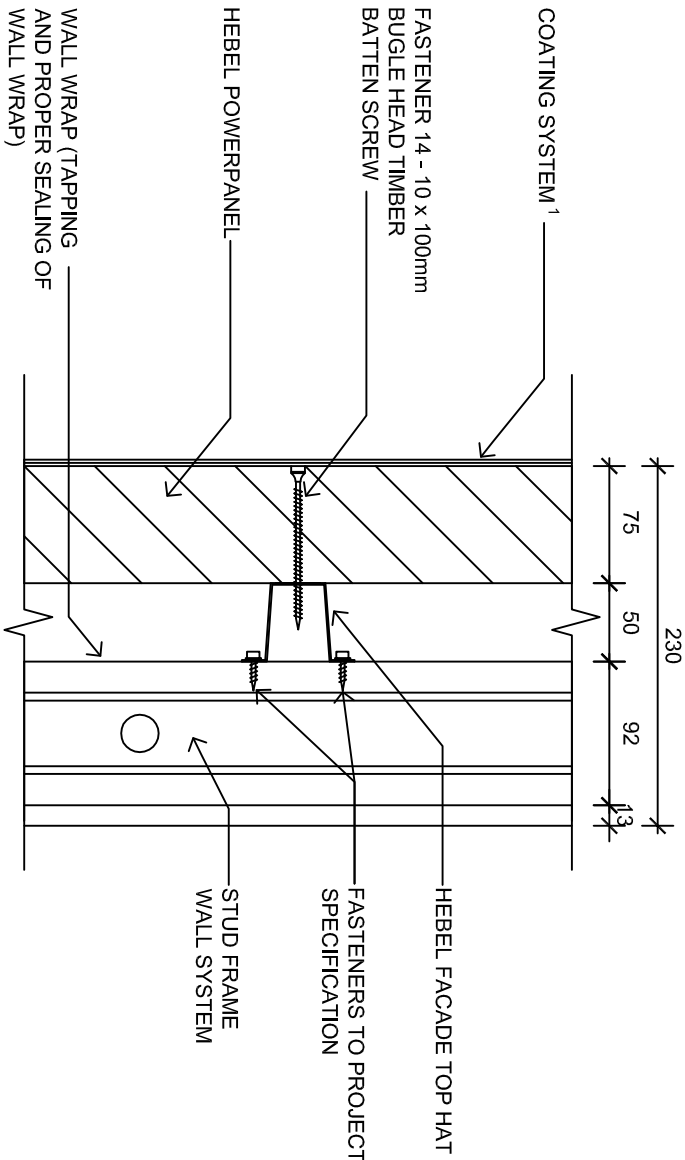
1. RONDO STEEL STUD FRAMING (OR APPROVED EQUIVALENT) MUST BE SPECIFIED IN ACCORDANCE WITH THE PROJECT WIND LOADS AS DETERMINED BY THE PROJECT DESIGN ENGINEER. A DESIGN CERTIFICATE PREPARED BY THE STUD FRAME MANUFACTURER OR PROJECT ENGINEER IN REGARDS TO THE STUD FRAMING SPECIFICATION MUST BE PROVIDED TO CSR HEBEL.
2. STEEL STUD FRAMING MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S OR PROJECT ENGINEER'S SPECIFICATION.
3. THE BUILDER IS TO PROVIDE A LETTER OR CERTIFICATION FOR STUD INSTALLATION FOLLOWING COMPLETION OF STUD FRAMING PROVIDED TO CSR HEBEL.
4. THE PROJECT DESIGN ENGINEER SHALL DESIGN THE STUDS AND TOP HAT SPACING IN ACCORDANCE TO TABLES 2.2 & 2.3 PROVIDED IN HEBEL HIGH RISE FACADE DESIGN AND INSTALLATION GUIDE.
5. THE PANEL MUST BE SET DOWN ON REBATE.

NOTE:

1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.
2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

<div><div><div><div>CSR BUILDING PRODUCTS LTD</div><div>Head Office: Trinit 3, 38 DELHI RD., NORTH RYDE NSW 2113</div><div>LOCKED BAG 1345, NORTH RYDE BC NSW 1670</div><div>A.B.N. 55 008 631 306 P.O. Box 1300, 369 248</div><div>www.hebelbuildingsolutions.com.au</div></div></div></div>				<div><div><div><div>The better way to build</div><div>CSR Building Products Limited</div></div></div><div><div>1/12 Macquarie Ferry Road</div><div>Penrith NSW 2150</div><div>Phone: (02) 4540 3300</div><div>Fax: (02) 4540 3300</div></div></div>			
FIGURE		3.3		TITLE		HIGH RISE MULTI-RESIDENT FACADES	
DESIGN DATE REFERENCE		SCALE		SHEET SIZE		DRAWN	
		1:20 @ A3		A3		DATE	
		SHEET NO.		CHECK		REVISION	
		1 of 17					

HIGH RISE MULTI-RESIDENTIAL FACADES
TYPICAL CONSTRUCTION DETAILS



TOP HAT FIXING DETAIL

SCALE: 1:5

KEY ASSUMPTIONS AND REQUIREMENTS:

1. COMPATIBLE ACRYLIC COATING SYSTEM TO SUITE HEBEL SUBSTRATE.
2. TAPING AND PROPER SEALING OF WALL WRAP.

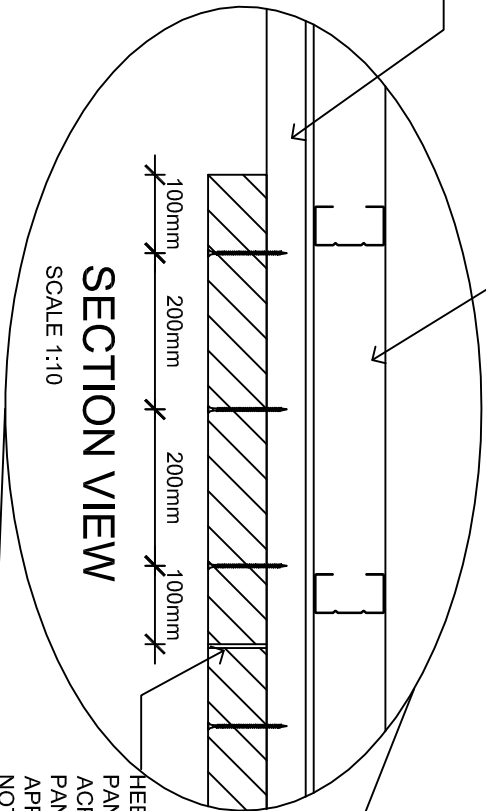
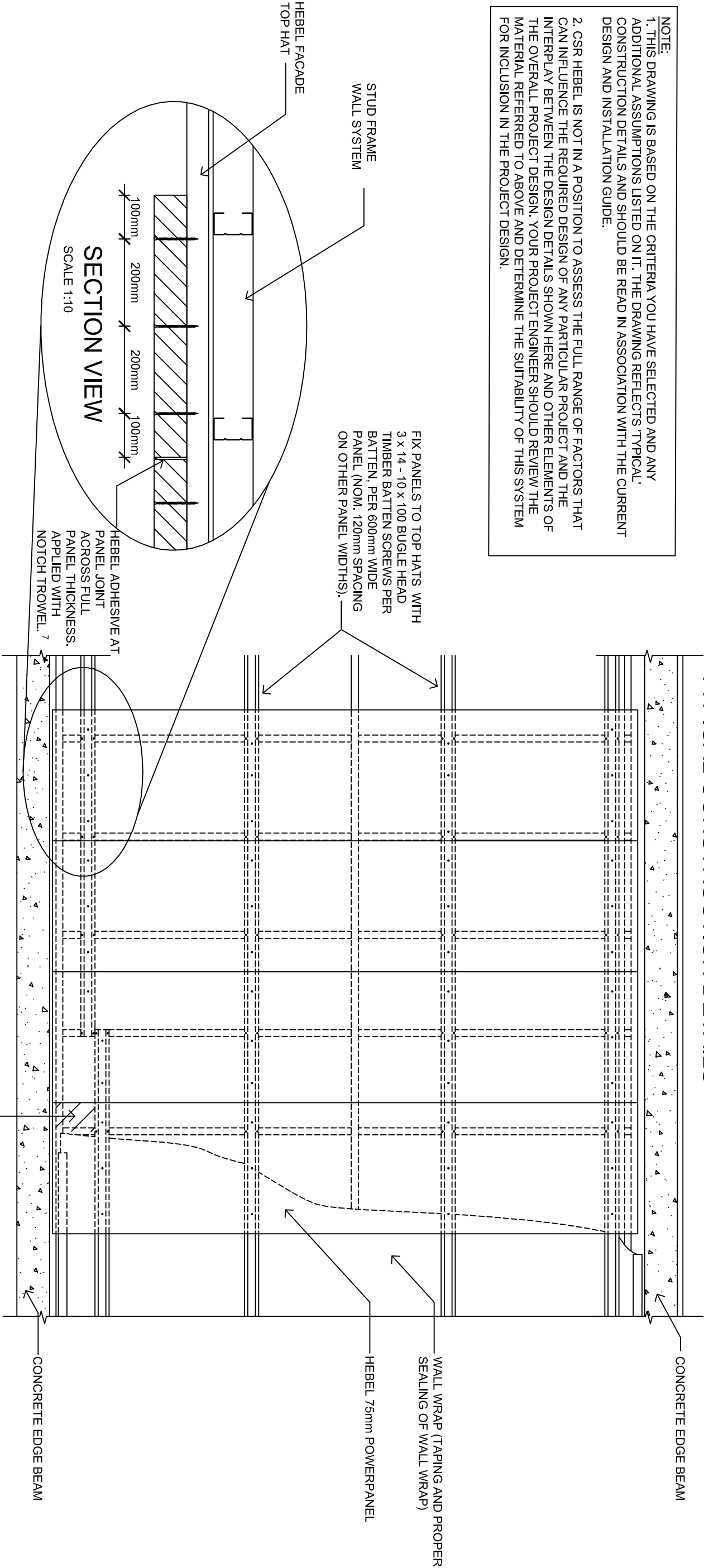
NOTE:

1. THIS DRAWING REFLECTS TYPICAL CONSTRUCTION DETAILS BASED ON THE ASSUMPTIONS SET OUT SEPARATELY ON THIS PAGE. IT SHOULD BE READ IN CONJUNCTION WITH THE RELEVANT DESIGN AND INSTALLATION GUIDE (ALSO AVAILABLE ON HEBELSPEC); AND
2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

<div><div><div><div><div><div></div></div></div><div><div><div></div><div></div></div></div><div><div><div></div></div></div></div></div><div><div>CSR BUILDING PRODUCTS LTD</div><div>Head Office: T1H113, 38 DELHI RD, NORTH RYDE, NSW 2113</div><div>LOCKED BAG 1345, NORTH RYDE BC, NSW 1670</div><div>A.B.N. 55 006 631 356 P.O. 1300 369 248</div><div>www.hebelaustralia.com.au</div></div></div>	<div><div><div><div><div></div></div></div><div><div><div></div><div></div></div></div><div><div><div></div></div></div></div></div> <div><div>The better way to build</div><div>CSR Building Products Limited</div><div>112 Macquarie Park Road</div><div>Sydney, NSW 2000</div><div>Phone: (02) 2540 3380</div><div>Fax: (02) 2540 3380</div><div>A.B.N. 55 006 631 356</div></div>	FIGURE	HIGH RISE MULTI-RESIDENTIAL FACADES				
		3.4	CONSTRUCTION DETAILS				
		SCALE	1:5 @ A3				
		SHEET SIZE	A3	DRAWN	DATE		
		SHEET NO.	2 of 17	CHECK	REVISION		

High Rise Multi-Residential Facades Typical Construction Details

NOTE:
1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.
2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

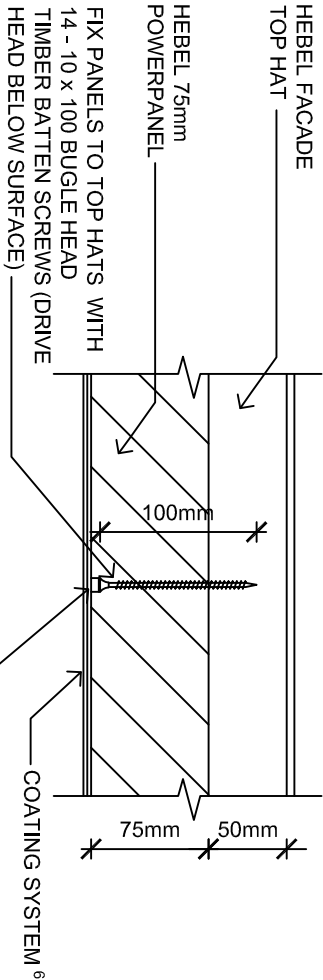


HEBEL ADHESIVE AT PANEL JOINT ACROSS FULL PANEL THICKNESS. APPLIED WITH NOTCH TROWEL. 7

HEBEL POWERPANEL FIXING DETAIL (VISIBLE EDGE BEAM SHOWN)

SCALE 1:20

- KEY ASSUMPTIONS AND REQUIREMENTS:
1. RONDO STEEL STUD FRAMING (OR APPROVED EQUIVALENT) MUST BE SPECIFIED IN ACCORDANCE WITH THE PROJECT WIND LOADS AS DETERMINED BY THE PROJECT DESIGN ENGINEER. A DESIGN CERTIFICATE PREPARED BY THE STUD FRAME MANUFACTURER OR PROJECT ENGINEER IN REGARDS TO THE STUD FRAMING SPECIFICATION MUST BE PROVIDED TO CSR HEBEL.
 2. STEEL STUD FRAMING MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S OR PROJECT ENGINEER'S SPECIFICATION.
 3. THE BUILDER IS TO PROVIDE A LETTER OR CERTIFICATION FOR STUD INSTALLATION FOLLOWING COMPLETION OF STUD FRAMING PROVIDED TO CSR HEBEL.
 4. THE PROJECT DESIGN ENGINEER SHALL DESIGN THE STUDS AND TOP HAT SPACING IN ACCORDANCE TO TABLES 2.2 & 2.3 PROVIDED IN HEBEL HIGH RISE FACADE DESIGN AND INSTALLATION GUIDE.
 5. THE PANEL MUST BE SET DOWN ON REBATE.
 6. COMPATIBLE ACRYLIC COATING SYSTEM TO SUITE HEBEL SUBSTRATE.
 7. THE ADHESIVE SHALL BE APPLIED EVENLY ACROSS THE PANEL. THICKNESS TO ENSURE A FULL ADHESIVE JOINT BETWEEN PANELS. THE ADHESIVE THAT SQUEEZES OUT AT THE PANEL JOINTS SHOULD BE SCRAPED AWAY AND LEVELLED AT THE JOINTS.



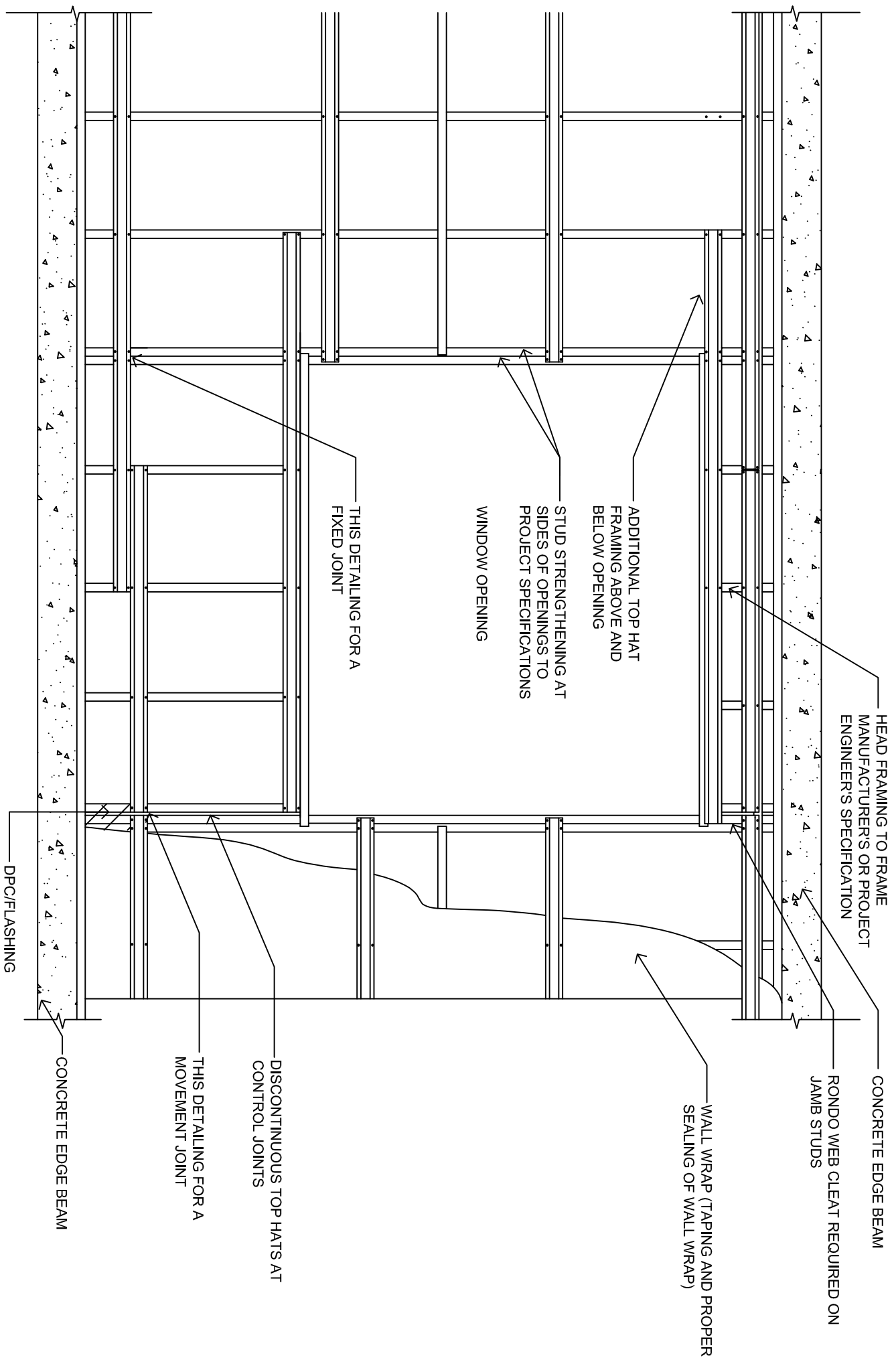
DETAIL VIEW

SCALE 1:10

FILL HOLE AND COVER HEAD WITH HEBEL ADHESIVE OR PATCH

<div><div><div>CSR</div><div>CSR BUILDING PRODUCTS LTD</div><div>Head Office, Tenth 3, 38 Deakin Rd, North Ryde, NSW 2113 Locked Bag 1345, North Ryde, NSW 1570 A.B.N. 55 008 631 356 P.O. 1300 369 448 www.hebelaustralia.com.au</div></div><div><div><div>hebel</div><div>The better way to build</div><div>CSR Building Products Limited</div></div><div><div>122 Macquarie Park Road Sydney, NSW 2000 Phone: (02) 240 3380 Fax: (02) 240 3385 A.B.N. 55 008 631 356</div></div></div></div>				FIGURE	3.5	TITLE		HIGH RISE MULTI-RESIDENTIAL FACADES	
DESIGN CODE REFERENCE				SCALE	1:20 @ A3	CONSTRUCTION DETAILS		SHEET NO.	3 of 17
				SHEET SIZE	A3	DRAWN		CHECK	
						DATE		REVISION	

HIGH RISE MULTI-RESIDENTIAL FACADES TYPICAL CONSTRUCTION DETAILS



WINDOW OPENING DETAIL (VISIBLE EDGE BEAM SHOWN)
BEHIND POWERPANEL

SCALE 1:20

- DOOR/WINDOWS WIDTH > 2400mm - CONTROL JOINTS TO BOTH SIDES OF THE OPENING MUST BE PROVIDED

NOTE A:
FOR MAJOR OPENINGS IN THE HEBEL POWERPANEL SYSTEM FOR FACADES, CSR HEBEL RECOMMENDS LOCATING MOVEMENT JOINTS ADJACENT TO THE OPENING.





CONTROL JOINTS AT DOOR/WINDOW OPENINGS:
- DOOR/WINDOWS WIDTH $\leq 2400\text{mm}$ - A CONTROL JOINT IS TO BE PROVIDED TO ONE SIDE OF THE OPENING (MINIMUM MUST BE PROVIDED)

KEY ASSUMPTIONS AND REQUIREMENTS:

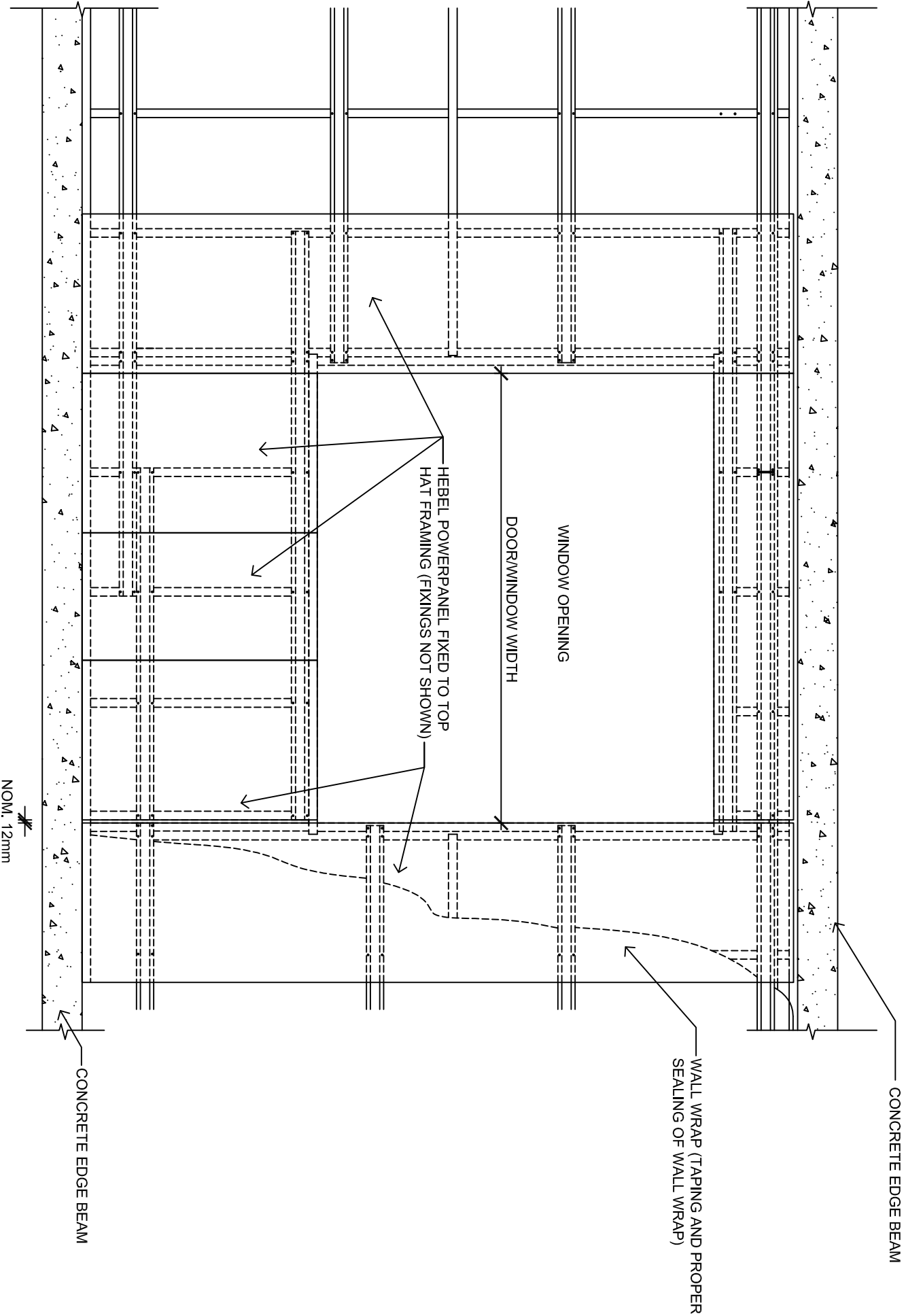
1. RONDO STEEL STUD FRAMING (OR APPROVED EQUIVALENT) MUST BE SPECIFIED IN ACCORDANCE WITH THE PROJECT WIND LOADS AS DETERMINED BY THE PROJECT DESIGN ENGINEER. A DESIGN CERTIFICATE PREPARED BY THE STUD FRAME MANUFACTURER OR PROJECT ENGINEER IN REGARDS TO THE STUD FRAMING SPECIFICATION MUST BE PROVIDED TO CSR HEBEL.
2. STEEL STUD FRAMING MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S OR PROJECT ENGINEER'S SPECIFICATION.
3. THE BUILDER IS TO PROVIDE A LETTER OR CERTIFICATION FOR STUD INSTALLATION FOLLOWING COMPLETION OF STUD FRAMING PROVIDED TO CSR HEBEL.
4. THE PROJECT DESIGN ENGINEER SHALL DESIGN THE STUDS AND TOP HAT SPACING IN ACCORDANCE TO TABLES 2.2 & 2.3 PROVIDED IN HEBEL HIGH RISE FACADE DESIGN AND INSTALLATION GUIDE.
5. THE PANEL MUST BE SET DOWN ON REBATE.

NOTE B:
1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.

2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

 The Better way to build				 The Better way to build	
CSR Building Products Limited A.B.N. 55 008 631 356				CSR Building Products Limited A.B.N. 55 008 631 356	
Head Office: Trinit 3, 38 DELHI RD., NORTH RYDE NSW 2113 LOCKED BAG 1345, NORTH RYDE BC NSW 1670 A.B.N. 55 008 631 356 Ph: 1300 369 448 www.hebelasia.com.au				Head Office: Trinit 3, 38 DELHI RD., NORTH RYDE NSW 2113 LOCKED BAG 1345, NORTH RYDE BC NSW 1670 A.B.N. 55 008 631 356 Ph: 1300 369 448 www.hebelasia.com.au	
					

HIGH RISE MULTI-RESIDENTIAL FACADES
TYPICAL CONSTRUCTION DETAILS



WINDOW OPENING DETAIL (VISIBLE EDGE BEAM SHOWN)
IN FRONT OF POWERPANEL
SCALE 1:20

- KEY ASSUMPTIONS AND REQUIREMENTS:
1. RONDO STEEL STUD FRAMING (OR APPROVED EQUIVALENT) MUST BE SPECIFIED IN ACCORDANCE WITH THE PROJECT WIND LOADS AS DETERMINED BY THE PROJECT DESIGN ENGINEER. A DESIGN CERTIFICATE PREPARED BY THE STUD FRAME MANUFACTURER OR PROJECT ENGINEER IN REGARDS TO THE STUD FRAMING SPECIFICATION MUST BE PROVIDED TO CSR HEBEL.
 2. STEEL STUD FRAMING MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS OR PROJECT ENGINEER'S SPECIFICATION.
 3. THE BUILDER IS TO PROVIDE A LETTER OR CERTIFICATION FOR STUD INSTALLATION FOLLOWING COMPLETION OF STUD FRAMING PROVIDED TO CSR HEBEL.
 4. THE PROJECT DESIGN ENGINEER SHALL DESIGN THE STUDS AND TOP HAT SPACING IN ACCORDANCE TO TABLES 2.2 & 2.3 PROVIDED IN HEBEL HIGH RISE FACADE DESIGN AND INSTALLATION GUIDE.
 5. THE PANEL MUST BE SET DOWN ON REBATE.

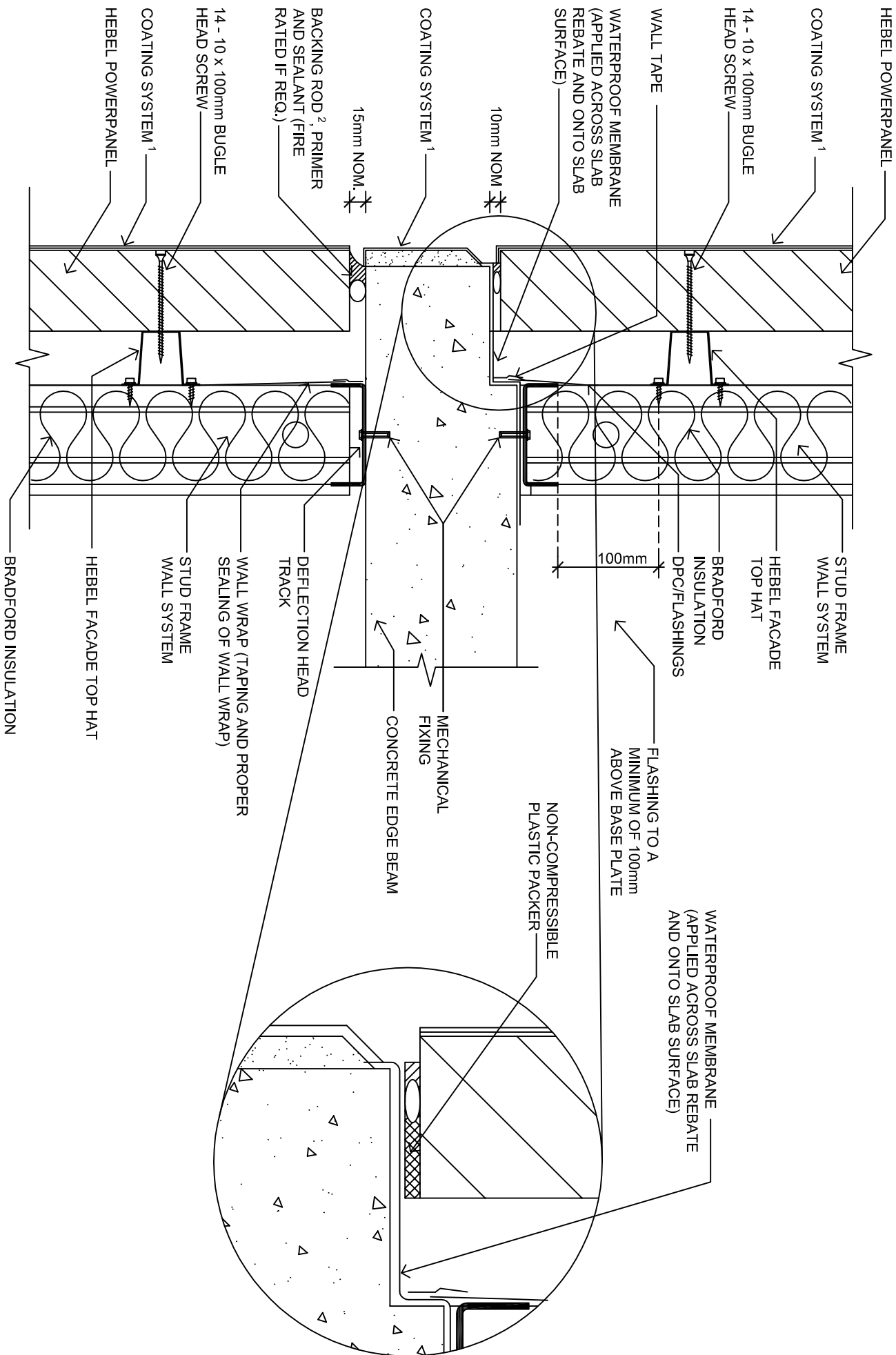
NOTE A:
FOR MAJOR OPENINGS IN THE HEBEL POWERPANEL SYSTEM FOR FACADES, CSR HEBEL RECOMMENDS LOCATING MOVEMENT JOINTS ADJACENT TO THE OPENING.

CONTROL JOINTS AT DOOR/WINDOW OPENINGS:
- DOOR/WINDOWS WIDTH ≤ 2400mm - A CONTROL JOINT IS TO BE PROVIDED TO ONE SIDE OF THE OPENING (MINIMUM MUST BE PROVIDED)
- DOOR/WINDOWS WIDTH > 2400mm - CONTROL JOINTS TO BOTH SIDES OF THE OPENING MUST BE PROVIDED

NOTE B:
1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.

2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

HIGH RISE MULTI-RESIDENTIAL FACADES
TYPICAL CONSTRUCTION DETAILS



HEAD/BASE FOR REBATED SLAB (HEBEL 2001)

SCALE: 1:5

KEY ASSUMPTIONS AND REQUIREMENTS:

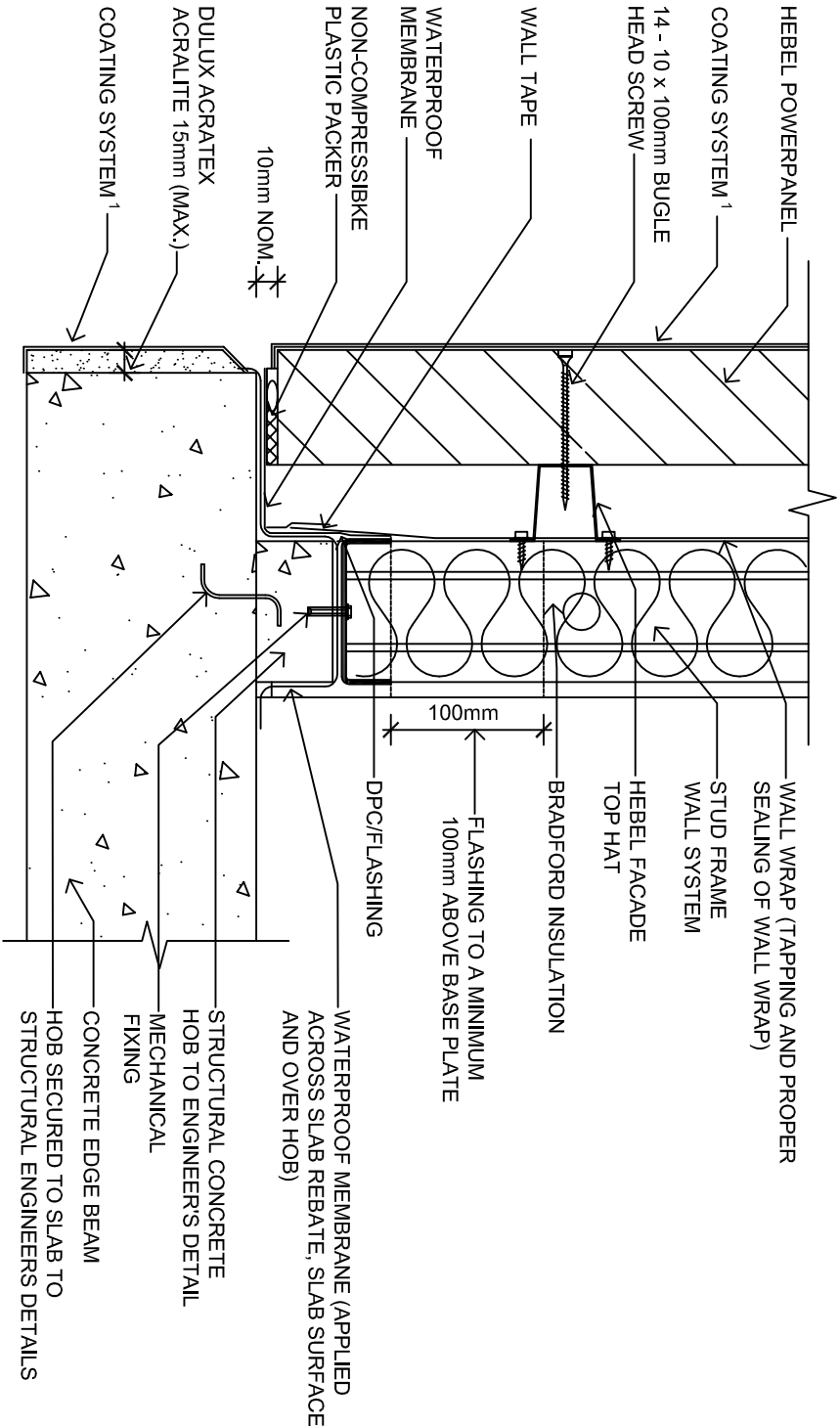
1. COMPATIBLE ACRYLIC COATING SYSTEM TO SUITE HEBEL SUBSTRATE.
2. BACKING ROD SHALL BE SET WITHIN THE JOINT TO ALLOW SUFFICIENT DEPTH OF SEALANT TO BE APPLIED THE JOINT.

NOTE:

1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.
2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

<div><div><div>CSR</div><div>CSR BUILDING PRODUCTS LTD</div><div>Head Office: T1111/3, 38 DEULIH RD, NORTH RYDE NSW 2113 LOCKED BAG 3345, NORTH RYDE BC NSW 1670 A.B.N. 55 006 631 356 P.O. 1300 369 448 www.hebelaustralia.com.au</div></div><div><div><div>hebel</div><div>The better way to build</div></div><div>112 Macquarie Park Road Sydney NSW 2000 Phone: (02) 9400 3380 Fax: (02) 9400 3380 A.B.N. 63 603 631 356</div></div></div>		FIGURE	3.8	TITLE		HIGH RISE MULTIRESIDENTIAL FACADES	
DESIGN CODE REFERENCE		SCALE	1:5 @ A3	SHEET SIZE	A3	DRAWN	DATE
		SHEET NO.	6 of 17	CHECK			REVISION

HIGH RISE MULTI-RESIDENTIAL FACADES
TYPICAL CONSTRUCTION DETAILS



BASE WITH HOB (HEBEL 2001)

SCALE: 1:5

KEY ASSUMPTIONS AND REQUIREMENTS:

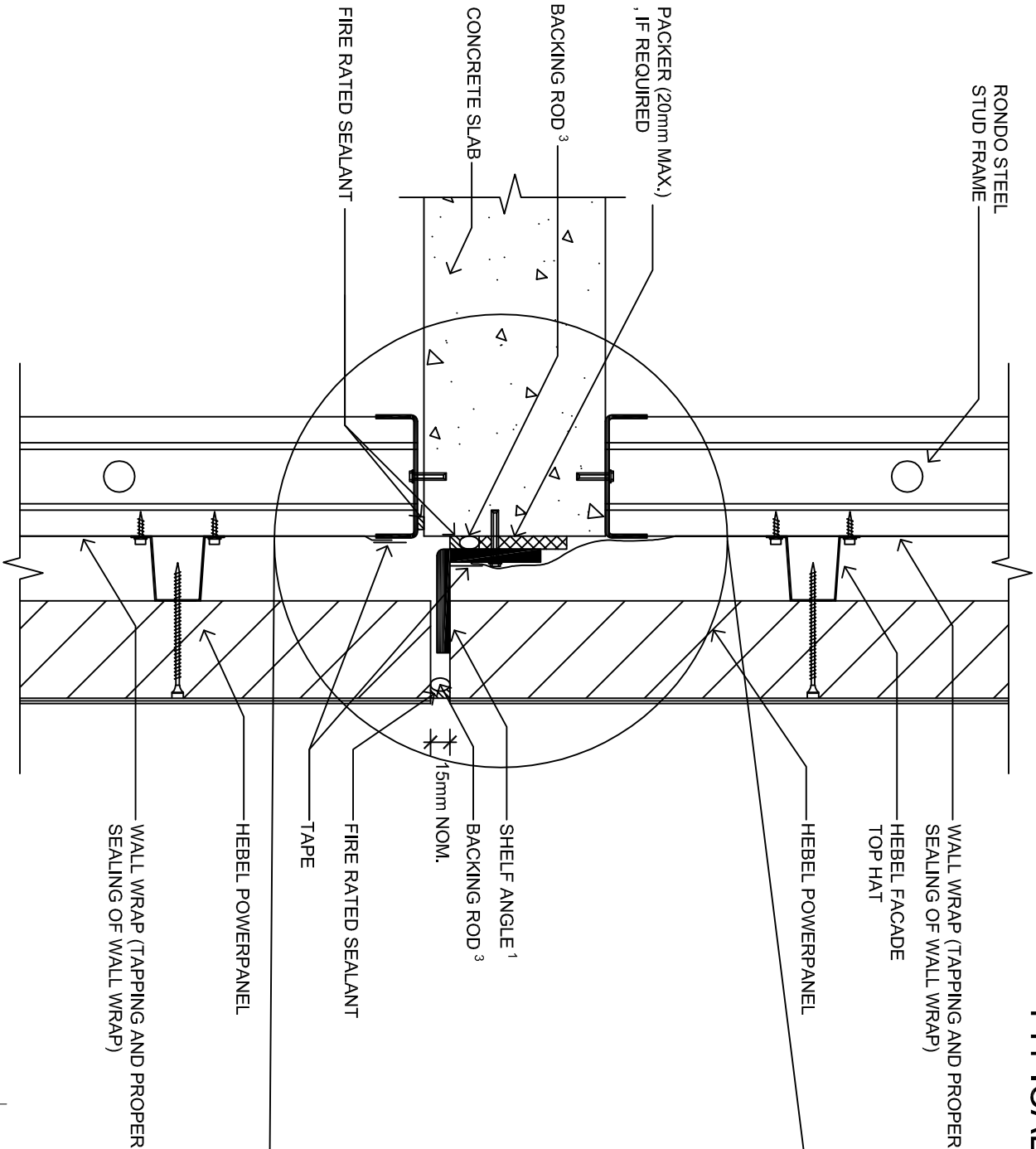
1. COMPATIBLE ACRYLIC COATING SYSTEM TO SUITE HEBEL SUBSTRATE.
2. BACKING ROD SHALL BE SET WITHIN THE JOINT TO ALLOW SUFFICIENT DEPTH OF SEALANT TO BE APPLIED THE JOINT.

NOTE:

1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.
2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

<div><div><div>CSR</div><div>CSR BUILDING PRODUCTS LTD</div><div>Head Office, Third 3, 38 DELU RD, NORTH RYDE, NSW 2113 LOCKED BAG 3345, NORTH RYDE, NSW 1570 A.B.N. 55 006 631 356 P.O. 1300 369 448 www.hebelaustralia.com.au</div></div><div><div>The better way to build</div><div>hebel</div><div>CSR Building Products Limited A.B.N. 55 006 631 356</div><div>112 Macquarie Park Road Sydney, NSW 2000 Phone: (02) 9400 3380 Fax: (02) 9400 3380</div></div></div>		FIGURE	3.9	TITLE		HIGH RISE MULTIRESIDENTIAL FACADES	
DESIGN CODE REFERENCE		SCALE	1:5 @ A3	SHEET SIZE	A3	DRAWN	DATE
		SHEET NO.	7 of 17	CHECK			REVISION

HIGH RISE MULTI-RESIDENTIAL FACADES
TYPICAL CONSTRUCTION DETAILS



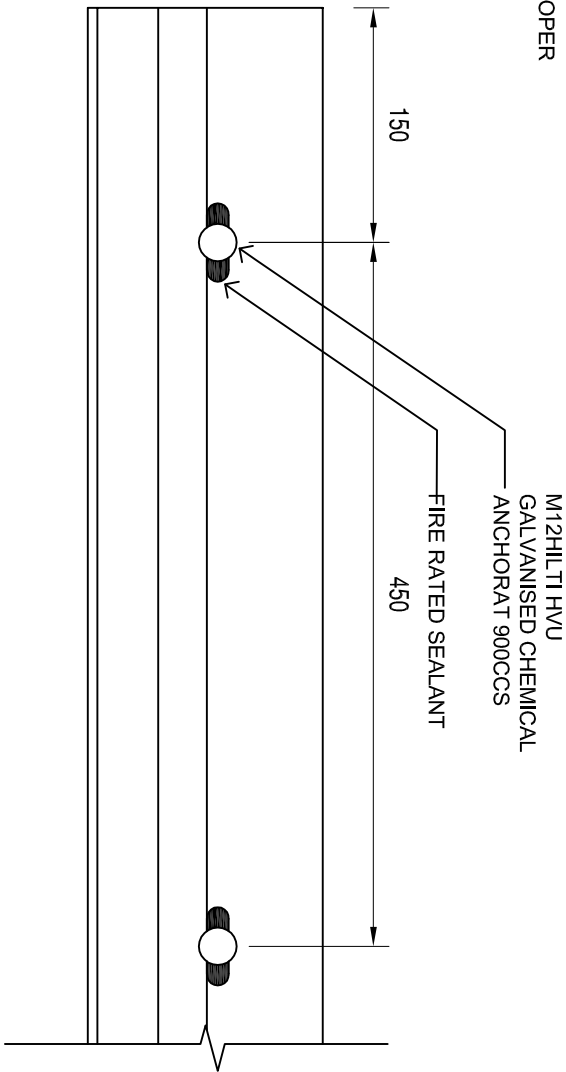
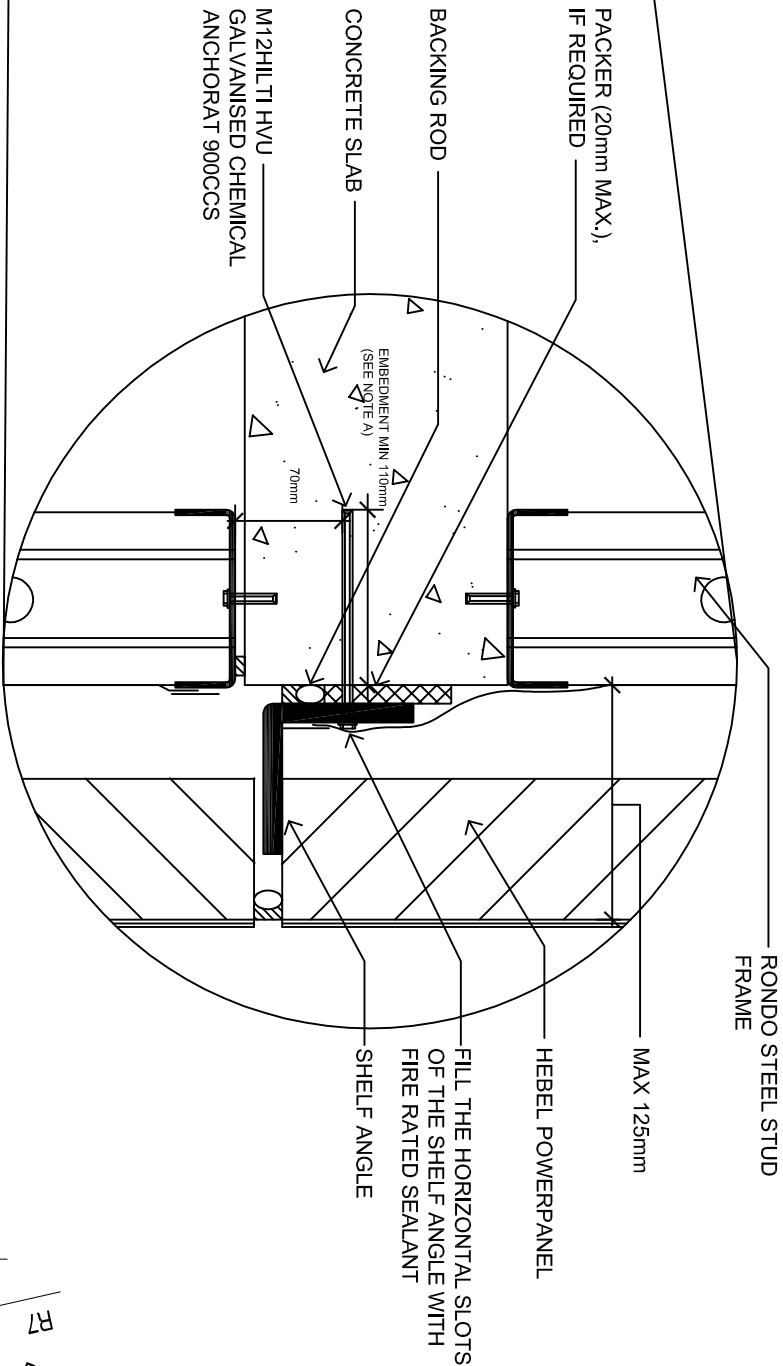
SELF ANGLE FIXING DETAIL (HEBEL 2000)
SCALE: 1:5

KEY ASSUMPTIONS AND REQUIREMENTS:

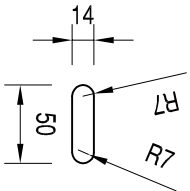
1. SHELF ANGLE BUTT JOINTS MUST BE FULLY SEALED WITH FIRE RATED SEALANT TO CLOSE GAPS BETWEEN ADJOINING SHELF ANGLE LENGTHS.
2. COMPATIBLE ACRYLIC COATING SYSTEM TO SUITE HEBEL SUBSTRATE.
3. BACKING ROD SHALL BE SET WITHIN THE JOINT TO ALLOW SUFFICIENT DEPTH OF SEALANT TO BE APPLIED THE JOINT.
4. WHERE EMBEDMENT OF ANCHOR SPACING IS LIMITED TO 70mm, THEN SPACING IS TO BE REDUCED TO 450CCS.

NOTE:

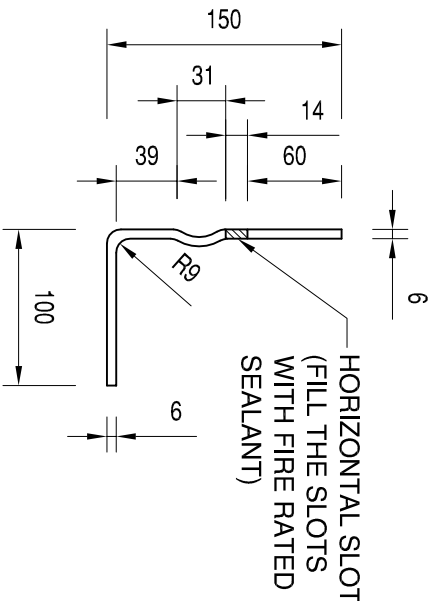
1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS TYPICAL CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.
2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.



SHELF ANGLE - ELEVATION DETAIL
SCALE: 1:10

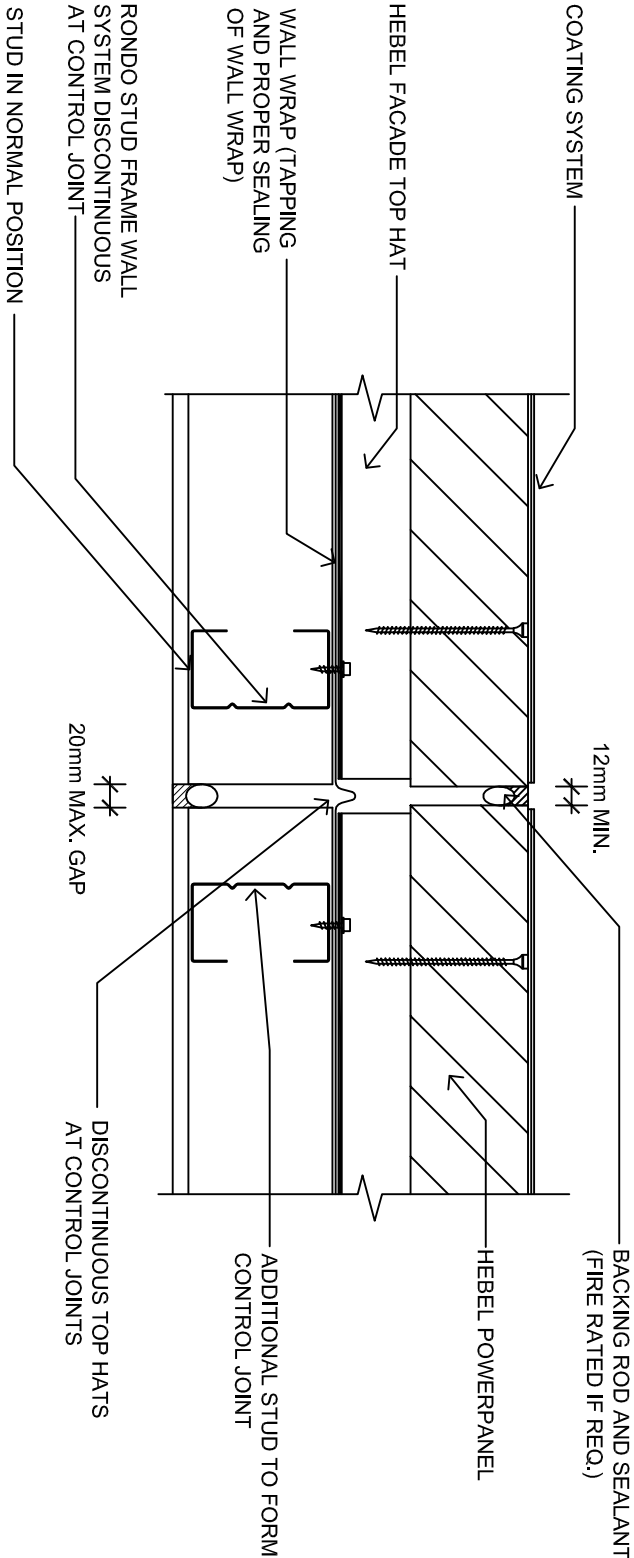


HORIZONTAL SLOT DETAIL
SCALE: 1:5

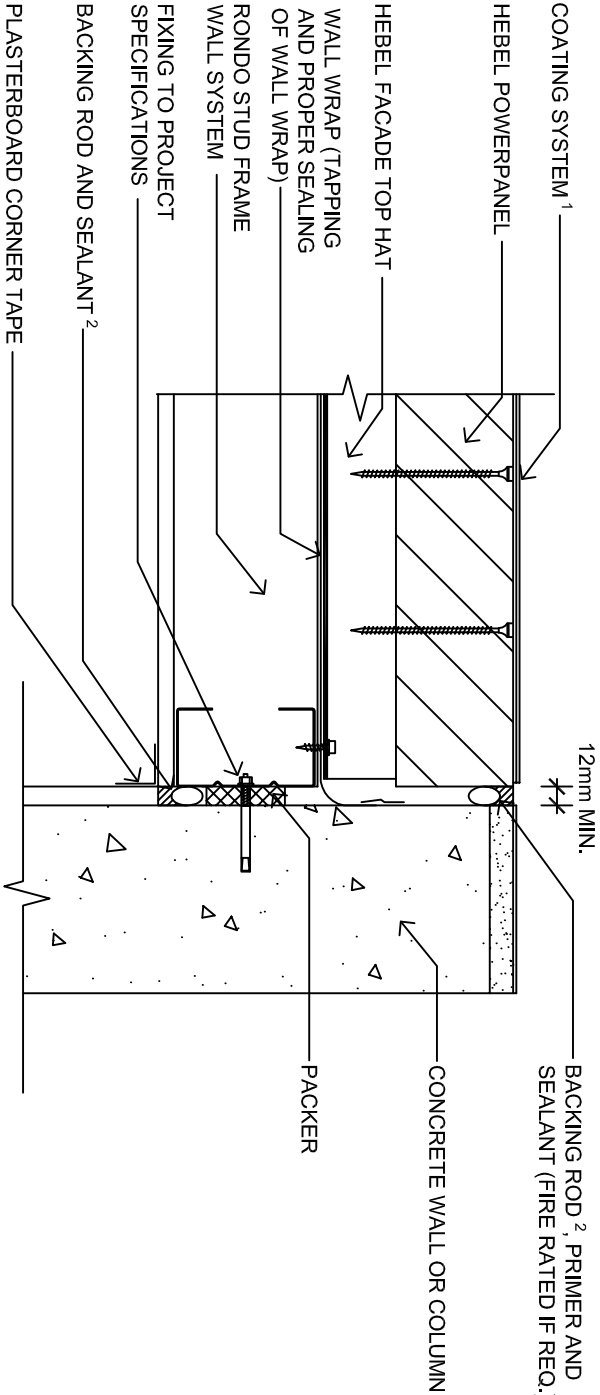


SHELF ANGLE - CROSS SECTION DETAIL
SCALE: 1:5

HIGH RISE MULTI-RESIDENTIAL FACADES
TYPICAL CONSTRUCTION DETAILS



CONTROL JOINT
SCALE: 1:5



JUNCTION WITH CONCRETE COLUMN
SCALE: 1:5

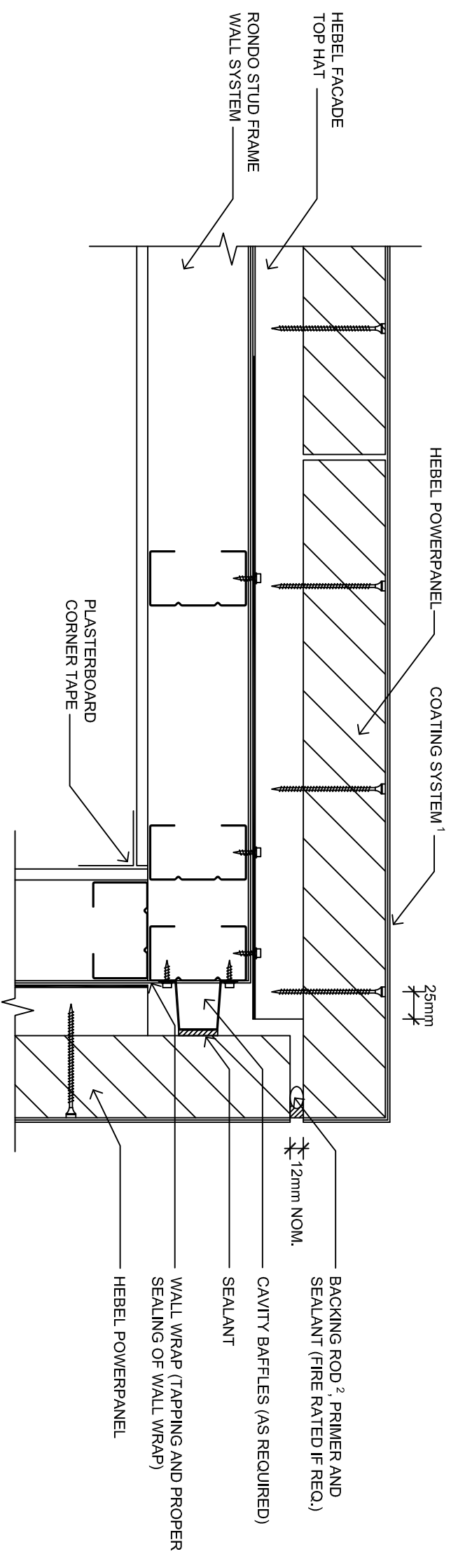
- KEY ASSUMPTIONS AND REQUIREMENTS:
1. COMPATIBLE ACRYLIC COATING SYSTEM TO SUITE HEBEL SUBSTRATE.
 2. BACKING ROD SHALL BE SET WITHIN THE JOINT TO ALLOW SUFFICIENT DEPTH OF SEALANT TO BE APPLIED THE JOINT.
 3. CONTROL JOINTS IN INTERNAL PLASTERBOARD LININGS TO BE INSTALLED IN ACCORDANCE WITH PLASTERBOARD MANUFACTURERS DETAIL.

NOTE:
1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.

2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

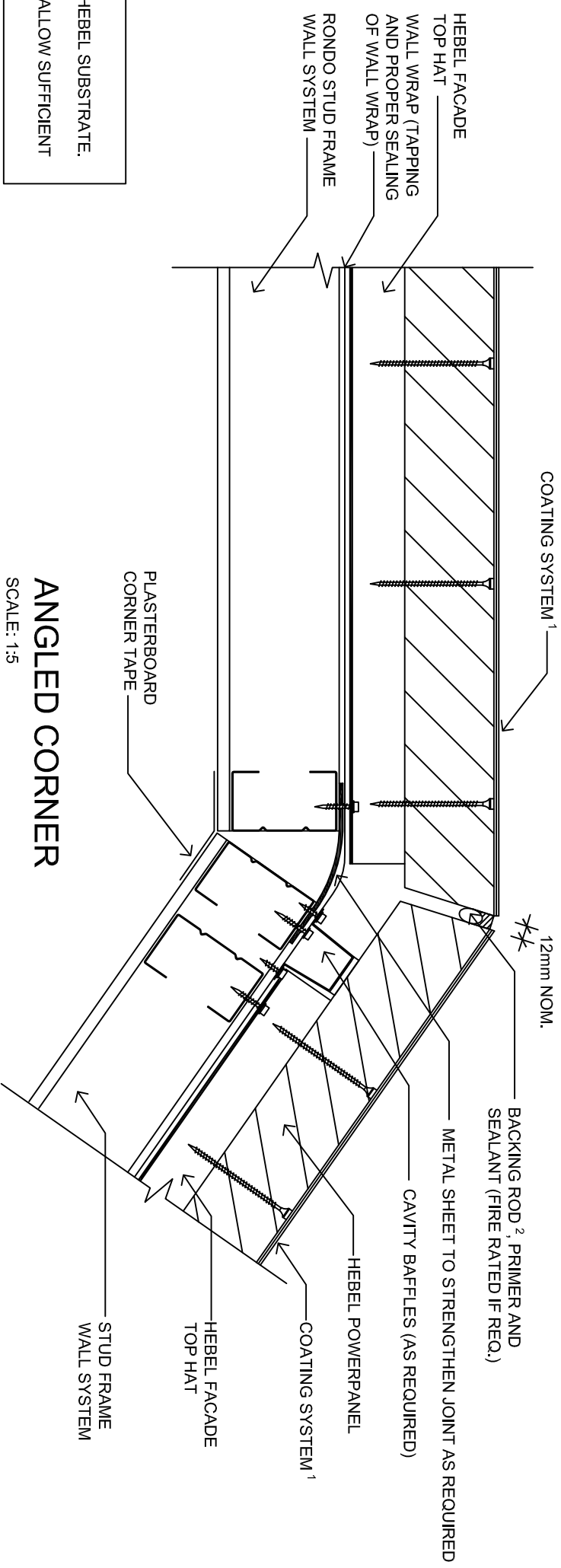
<div><div><div>CSR</div><div>CSR BUILDING PRODUCTS LTD Head Office: T11H13, 38 DELU RD, NORTH RYDE NSW 2113 A.B.N. 55 006 631 356 P.O. 1300 369 448 www.hebelaustralia.com.au</div></div><div><div>The better way to build</div><div>hebel</div><div>CSR Building Products Limited 112 Macquarie Park Road Sydney NSW 2000 Phone: (02) 9400 3300 Fax: (02) 9400 3300 A.B.N. 63 006 631 356</div></div></div>		FIGURE 3.11 - 3.12	TITLE HIGH RISE MULTIRESIDENTIAL FACADES CONSTRUCTION DETAILS		SCALE 1:5 @ A3		SHEET NO. 9 of 17	CHECK	REVISION
DESIGN CODE REFERENCE		SHEET SIZE A3		DRAWN		DATE			

HIGH RISE MULTI-RESIDENTIAL FACADES TYPICAL CONSTRUCTION DETAILS



EXTERNAL CORNER

SCALE: 1:5



ANGLED CORNER

SCALE: 1:5


KEY ASSUMPTIONS AND REQUIREMENTS:

1. COMPATIBLE ACRYLIC COATING SYSTEM TO SUITE HEBEL SUBSTRATE.
2. BACKING ROD SHALL BE SET WITHIN THE JOINT TO ALLOW SUFFICIENT DEPTH OF SEALANT TO BE APPLIED THE JOINT.

NOTE:

1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.

2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.



CSR BUILDING PRODUCTS LTD
 Head Office: Trimh 3, 39 DELHI RD, NORTH RYDE NSW 2113
 LOCKED BAG 1345, NORTH RYDE BC NSW 1670
 A.B.N. 55 008 631 356 Pst: 1300 369 448
 www.hebelstrata.com.au

hebel
 The better way to build

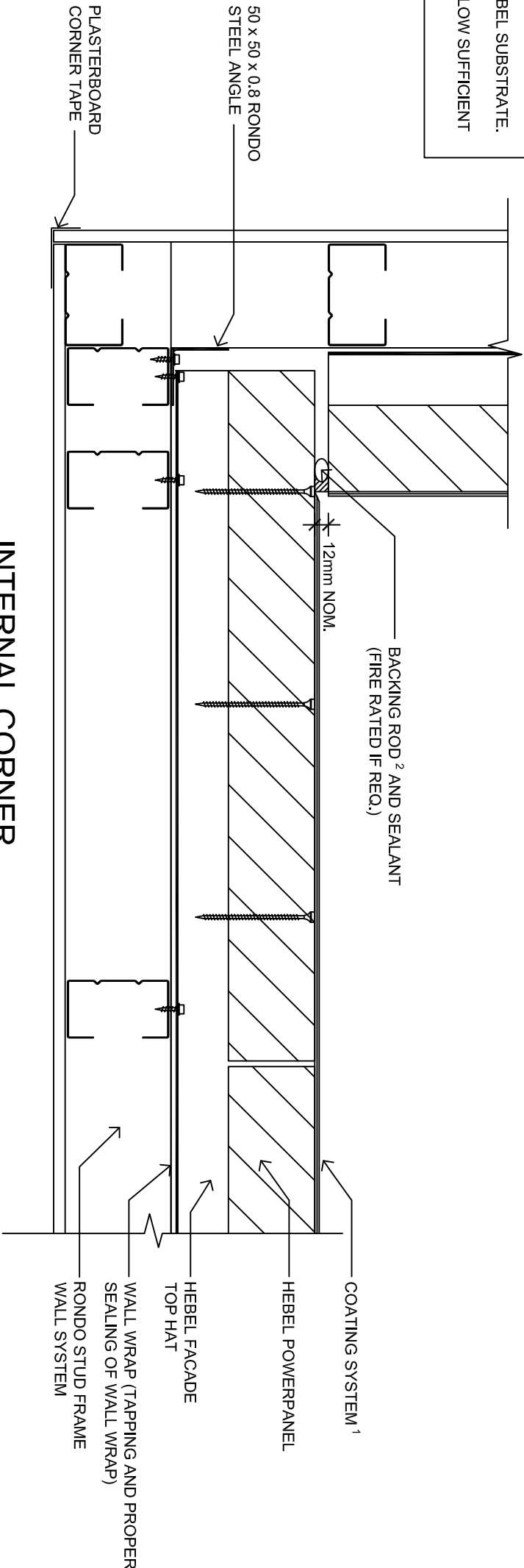
112 Williams Ferry Road
 Somersby NSW 1570
 Phone: (02) 9540 6500
 Fax: (02) 450 3300
 A.B.N. 55 008 631 356

FIGURE		TITLE	
3.13 - 3.14		HIGH RISE MULTIRESIDENTIAL FACADES CONSTRUCTION DETAILS	
DESIGN CODE REFERENCE	SCALE	SHEET SIZE	DATE
	1:5 @ A3	A3	
		SHEET NO. 10 of 17	CHECK REVISION

HIGH RISE MULTI-RESIDENTIAL FACADES TYPICAL CONSTRUCTION DETAILS

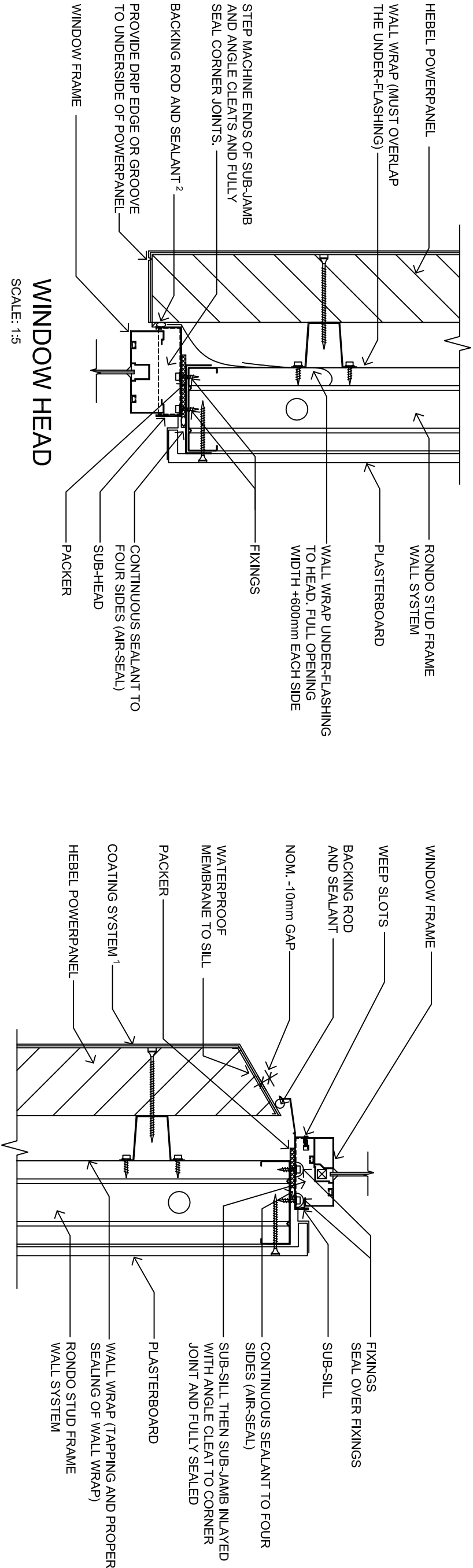
KEY ASSUMPTIONS AND REQUIREMENTS:

1. COMPATIBLE ACRYLIC COATING SYSTEM TO SUITE HEBEL SUBSTRATE.
2. BACKING ROD SHALL BE SET WITHIN THE JOINT TO ALLOW SUFFICIENT DEPTH OF SEALANT TO BE APPLIED THE JOINT.



INTERNAL CORNER

SCALE: 1:5



WINDOW HEAD

SCALE: 1:5

WINDOW SILL

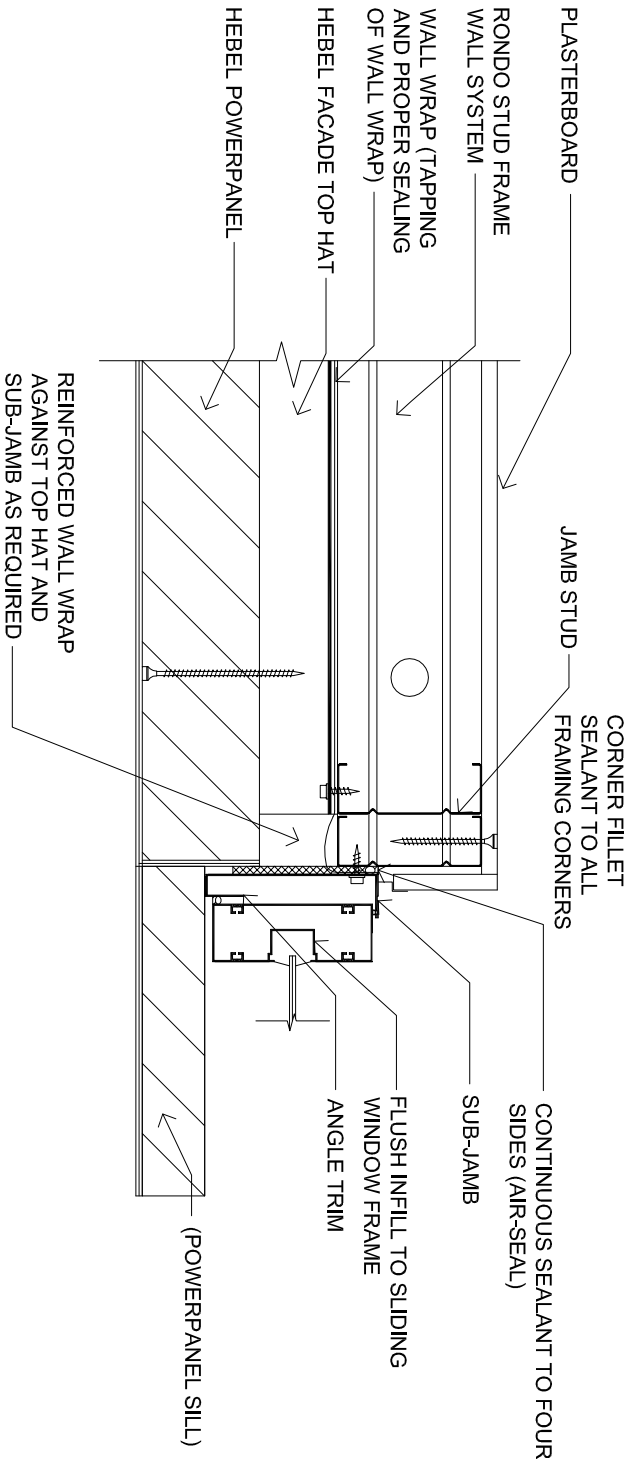
SCALE: 1:5

NOTE:

1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.
2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

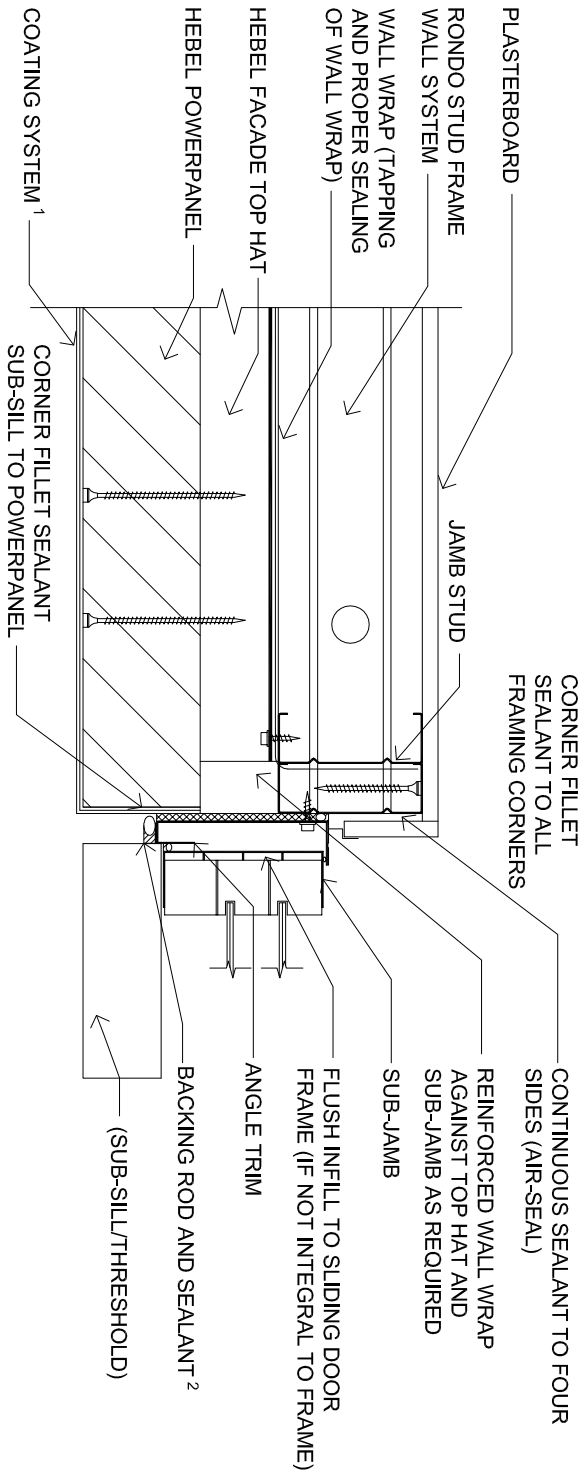
<div><div><div>CSR</div></div><div>CSR BUILDING PRODUCTS LTD Head Office: Tenth 3, 28 DELU RD, NORTH RYDE NSW 2113 Locked Bag 3345, North Ryde BC NSW 1570 A.B.N. 55 008 631 356 P.O. 1300 369 448 www.hebelaustralia.com.au</div></div>		<div><div><div>hebel</div></div><div>The better way to build CSR Building Products Limited A.B.N. 55 008 631 356 112 Macquarie Park Road Sydney NSW 2000 Phone: (02) 9400 3300 Fax: (02) 9400 3300</div></div>		FIGURE 3.15 - 3.17	TITLE HIGH RISE MULTIRESIDENTIAL FACADES CONSTRUCTION DETAILS		
DESIGN CODE REFERENCE		SCALE 1:5 @ A3		SHEET NO. 11 of 17	SHEET SIZE A3		
				DRAWN		DATE	
				CHECK		REVISION	

High Rise Multi-Residential Facades Typical Construction Details



WINDOW JAMB

SCALE: 1:5



SLIDING DOOR JAMB AT BASE

SCALE: 1:5

KEY ASSUMPTIONS AND REQUIREMENTS:
1. COMPATIBLE ACRYLIC COATING SYSTEM TO SUITE HEBEL SUBSTRATE.

2. BACKING ROD SHALL BE SET WITHIN THE JOINT TO ALLOW SUFFICIENT DEPTH OF SEALANT TO BE APPLIED THE JOINT.

3. THE WINDOW MANUFACTURER IS TO SUPPLY THE AIR SEAL DETAIL FOR SLIDING DOOR JAMB, SO THAT AIR CAN NOT VENT INTO WALL CAVITY. CSR HEBEL RECOMMENDS THE USE OF FULL PERIMETER SUB-FRAMES.

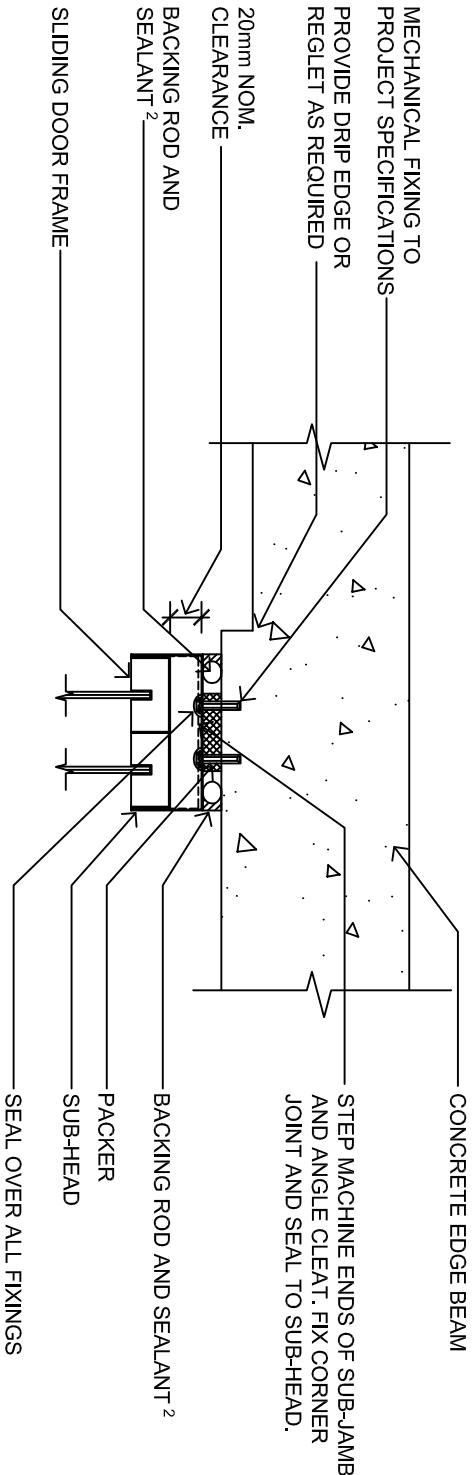
NOTE:

1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.

2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

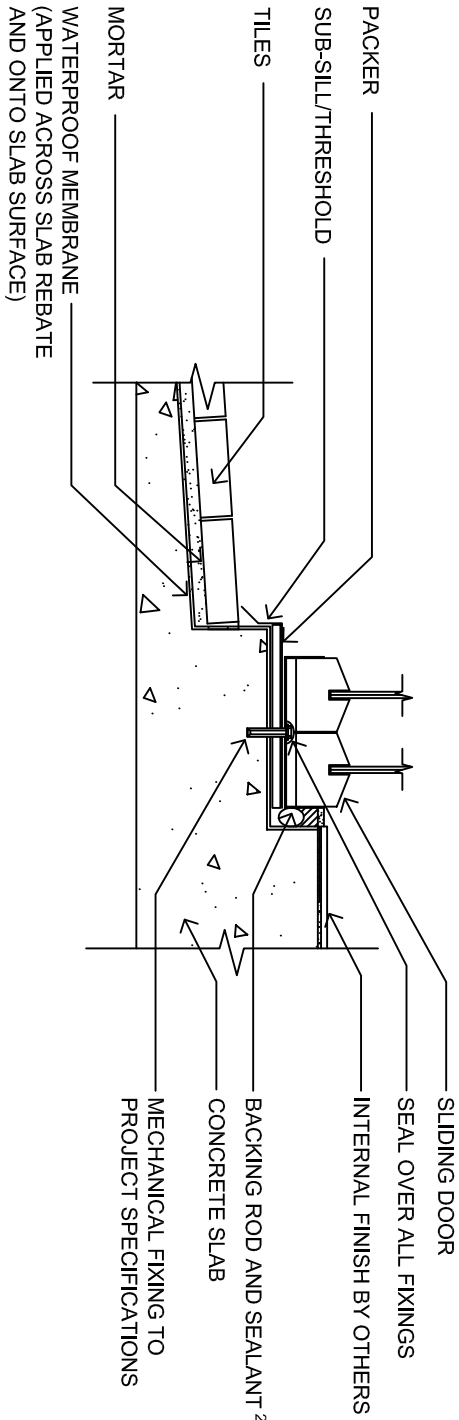
<div><div><div>CSR</div><div>CSR BUILDING PRODUCTS LTD</div><div>Head Office: T1H113, 38 DEWIL RD, NORTH RYDE NSW 2113 Locked Bag 3345, North Ryde BC NSW 1570 A.B.N. 55 008 631 356 P.O. 1300 369 448 www.hebelaustralia.com.au</div></div><div><div><div>hebel</div><div>The better way to build</div></div><div><div>112 Macquarie Park Road Sydney NSW 2000 Phone: (02) 9400 3388 Fax: (02) 9400 3389 A.B.N. 55 008 631 356</div></div></div></div>		FIGURE	3.18 - 3.19		TITLE		HIGH RISE MULTIRESIDENTIAL FACADES		
DESIGN GUIDE REFERENCE		SCALE	1:5 @ A3		SHEET SIZE	A3		DRAWN	DATE
		SHEET NO.	12 of 17		CHECK			REVISION	

HIGH RISE MULTI-RESIDENTIAL FACADES
TYPICAL CONSTRUCTION DETAILS



SLIDING DOOR HEAD

SCALE: 1:5



SLIDING DOOR BASE - SIDE ELEVATION

SCALE: 1:5

KEY ASSUMPTIONS AND REQUIREMENTS:

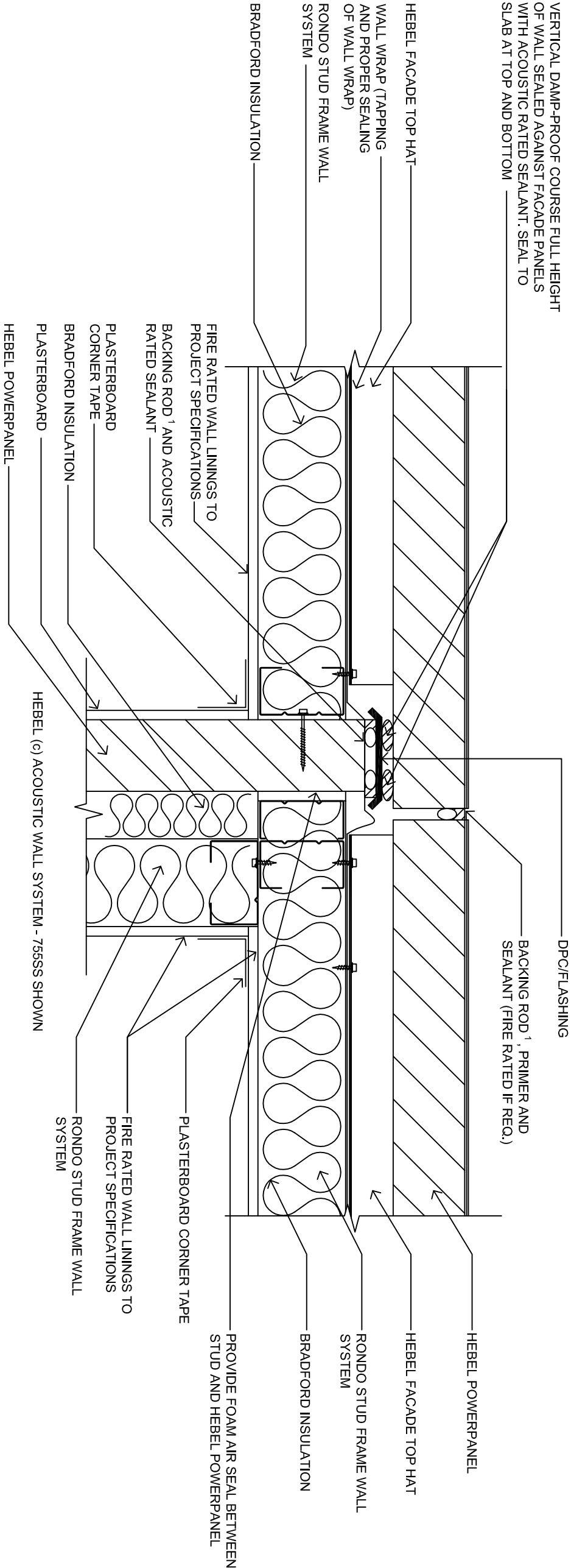
1. COMPATIBLE ACRYLIC COATING SYSTEM TO SUITE HEBEL SUBSTRATE.
2. BACKING ROD SHALL BE SET WITHIN THE JOINT TO ALLOW SUFFICIENT DEPTH OF SEALANT TO BE APPLIED THE JOINT.

NOTE:

1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.
2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

<div><div><div>CSR</div><div>CSR BUILDING PRODUCTS LTD</div><div>Head Office, Third 3, 38 DELHI RD, NORTH RYDE, NSW 2113</div><div>LOCKED BAG 1345, NORTH RYDE BC, NSW 1670</div><div>A.B.N. 55 006 631 356 P.O. 1300 369 448</div><div>www.hebelaustralia.com.au</div></div><div><div><div>hebel</div><div>The better way to build</div><div>CSR Building Products Limited</div><div>A.B.N. 55 006 631 356</div><div>112 Wentworth Ferry Road</div><div>Sydney NSW 2000</div><div>Phone: (02) 2540 3380</div><div>Fax: (02) 2540 3380</div></div></div></div>		FIGURE	3.20 - 3.21	TITLE		HIGH RISE MULTI-RESIDENTIAL FACADES CONSTRUCTION DETAILS	
DESIGN CODE REFERENCE		SCALE	1:5 @ A3	SHEET SIZE		A3	
SHEET NO.		13 of 17	DRAWN		DATE		
CHECK		REVISION					

HIGH RISE MULTI-RESIDENTIAL FACADES
TYPICAL CONSTRUCTION DETAILS



IMPORTANT: TREATMENT OF PARTY WALL
JUNCTIONS REQUIRES SPECIFIC PROJECT DESIGN
AND APPROVAL BY STRUCTURAL, FIRE, ACOUSTIC
AND OTHER PROJECT CONSULTANTS.

PARTY WALL INTERSECTION

SCALE: 1:5

KEY ASSUMPTIONS AND REQUIREMENTS:

1. BACKING ROD SHALL BE SET WITHIN THE JOINT TO ALLOW SUFFICIENT DEPTH OF SEALANT TO BE APPLIED THE JOINT.

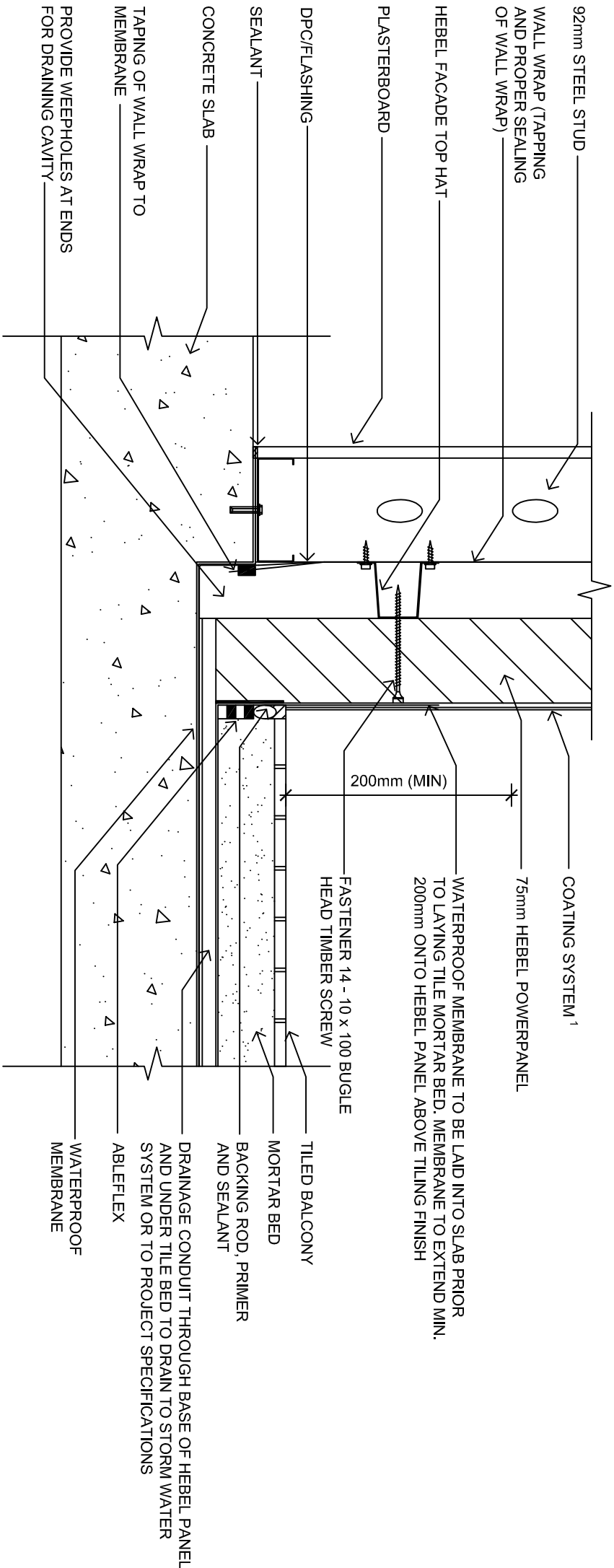
NOTE:

1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE
DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN
AND INSTALLATION GUIDE.

2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN
OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF
THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND
DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

<div><div><div>CSR</div><div>CSR BUILDING PRODUCTS LTD</div><div>Head Office, Third 3, 38 DEUHL RD, NORTH RYDE, NSW 2113 LOCKED BAG 3345, NORTH RYDE, NSW 2113 A.B.N. 55 006 631 356 P.O. Box 1300 369 448 www.hebelusa.com.au</div></div><div><div>hebel</div><div>The better way to build</div><div>CSR Building Products Limited A.B.N. 55 006 631 356</div></div><div><div>112 Macquarie Street, Sydney Sydney, NSW 2000 Phone: (02) 240 3380 Fax: (02) 240 3380</div></div></div>		FIGURE	3.22	TITLE		HIGH RISE MULTIRESIDENTIAL FACADES	
DESIGN CODE REFERENCE		SCALE	1:5 @ A3	SHEET SIZE	A3	DRAWN	DATE
SHEET NO.		14 of 17	CHECK	REVISION			

HIGH RISE MULTI-RESIDENTIAL FACADES
TYPICAL CONSTRUCTION DETAILS



BALCONY DETAIL
SCALE: 1:5

KEY ASSUMPTIONS AND REQUIREMENTS:

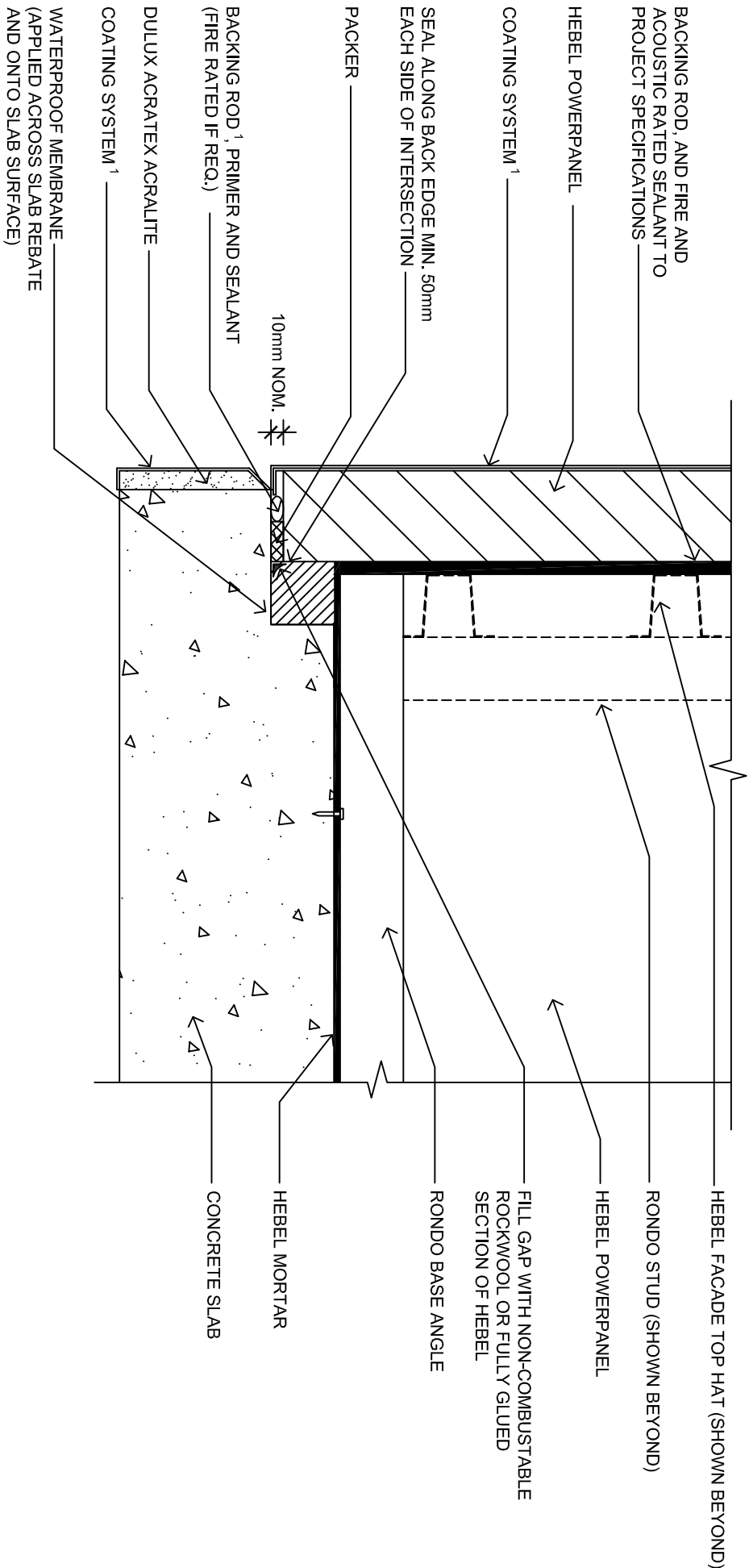
1. COMPATIBLE ACRYLIC COATING SYSTEM TO SUITE HEBEL SUBSTRATE.
2. PRESSURE EQUALISATION SLOTS ARE TO BE INSTALLED AT THE TOPS OF PANELS AT MAX. 3.0m CTRS OVER BALCONIES GREATER THAN 3m IN WIDTH.

NOTE:

1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.
2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

<div><div><div>CSR</div></div><div>CSR BUILDING PRODUCTS LTD Head Office: T11H13, 38 DELHI RD, NORTH RYDE NSW 2113 LOCKED BAG 3345, NORTH RYDE BC NSW 1670 A.B.N. 55 006 631 356 P.O. 1300 369 448 www.hebelusitalia.com.au</div></div>		<div><div><div>hebel</div><div>The better way to build</div></div><div>CSR Building Products Limited 112 Macquarie Park Road Sorrento, NSW 2050 Phone: (02) 9400 3380 Fax: (02) 9400 3380 A.B.N. 55 006 631 356</div></div>		FIGURE		3.23		TITLE		HIGH RISE MULTI-RESIDENTIAL FACADES	
DESIGN GUIDE REFERENCE		SCALE		1:5 @ A3		SHEET SIZE		A3		DRAWN	
		SHEET NO.		15 of 17		CHECK				REVISION	

HIGH RISE MULTI-RESIDENTIAL FACADES
TYPICAL CONSTRUCTION DETAILS



INTERTENANCY FACADE JUNCTION DETAIL
SCALE: 1:5

KEY ASSUMPTIONS AND REQUIREMENTS:

1. COMPATIBLE ACRYLIC COATING SYSTEM TO SUITE HEBEL SUBSTRATE.
2. BACKING ROD SHALL BE SET WITHIN THE JOINT TO ALLOW SUFFICIENT DEPTH OF SEALANT TO BE APPLIED THE JOINT.

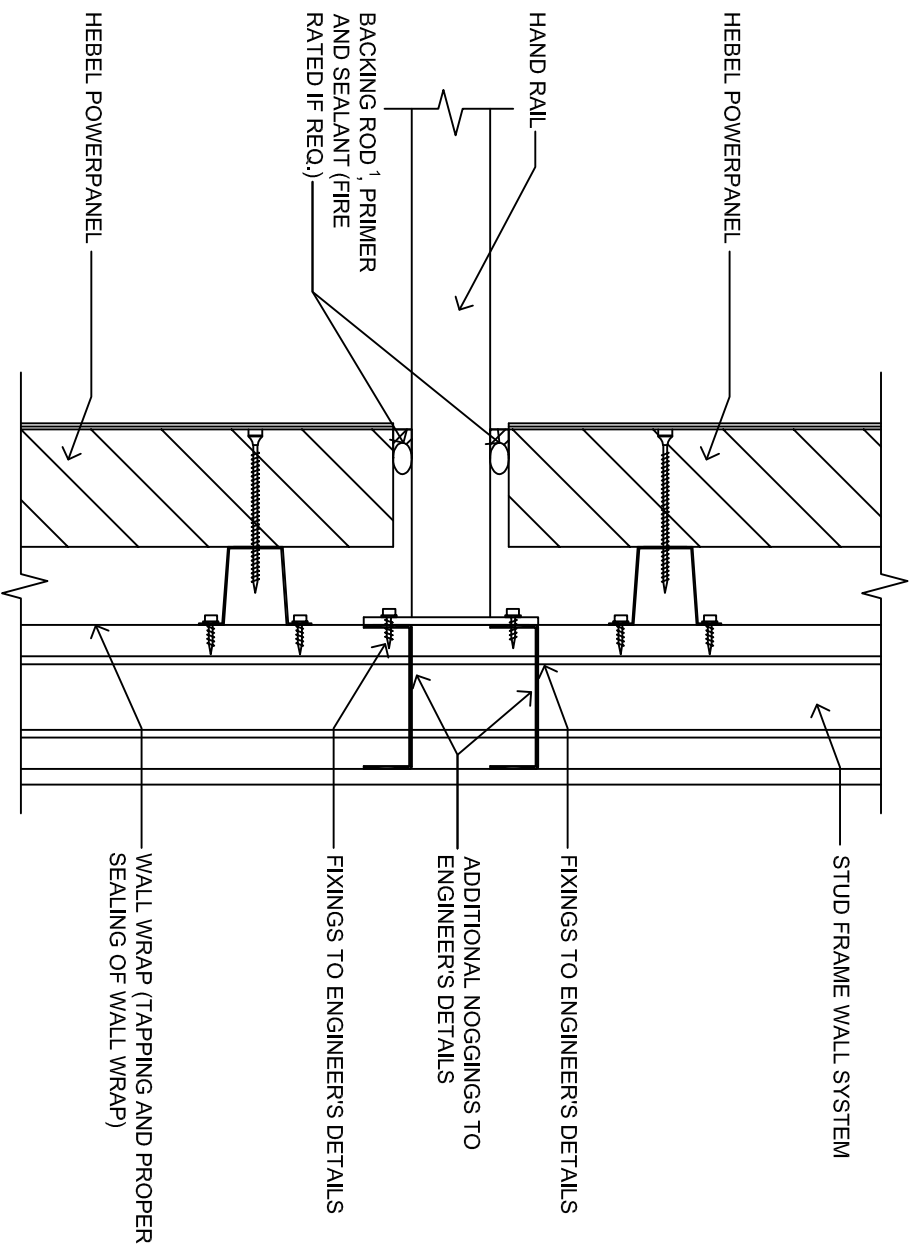
NOTE:

1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.

2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

<div><div><div>CSR</div></div><div>CSR BUILDING PRODUCTS LTD Head Office: Tenth 3, 39 DELHI RD, NORTH RYDE NSW 2113 LOCKED BAG 3345, NORTH RYDE BC NSW 1670 A.B.N. 55 008 631 356 Ptn: 1300 369 448 www.hebelaustralia.com.au</div></div>		<div><div><div>hebel</div></div><div>The better way to build</div><div>CSR Building Products Limited A.B.N. 55 008 631 356</div></div>		FIGURE 3.24	TITLE HIGH RISE MULTI-RESIDENTIAL FACADES CONSTRUCTION DETAILS		SHEET SIZE A3		SCALE 1:5 @ A3		SHEET NO. 16 of 17		SHEET NO. 16 of 17		CHECK		REVISION	
DESIGN GUIDE REFERENCE		DATE		DRAWN		DATE		CHECK		REVISION								

HIGH RISE MULTI-RESIDENTIAL FACADES TYPICAL CONSTRUCTION DETAILS

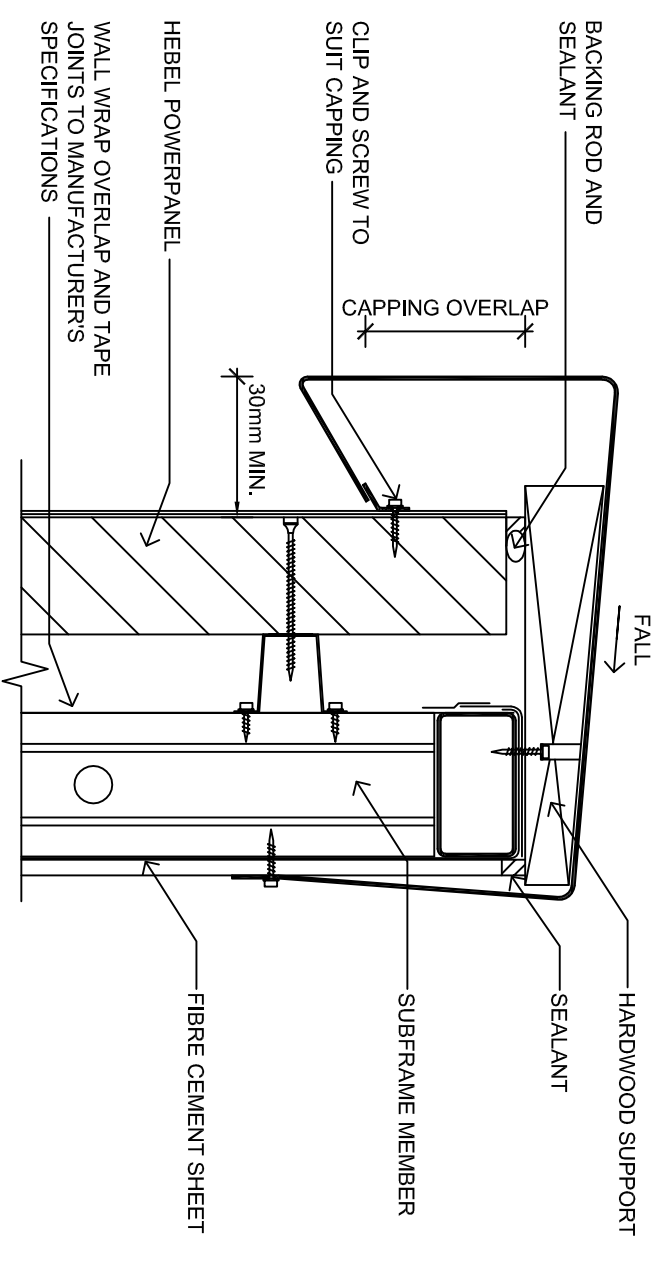


HANDRAIL ATTACHMENT

SCALE: 1:5

PARAPET CAPPING

SCALE: 1:5



ULTIMATE DESIGN WIND PRESSURE (kPa)	CAPPING OVERLAP MINIMUM (mm)
1.5	50
3.5	100
5.0	150
7.0	200

CAPPING OVERLAP TABLE

NOTE:

1. THIS DRAWING IS BASED ON THE CRITERIA YOU HAVE SELECTED AND ANY ADDITIONAL ASSUMPTIONS LISTED ON IT. THE DRAWING REFLECTS 'TYPICAL' CONSTRUCTION DETAILS AND SHOULD BE READ IN ASSOCIATION WITH THE CURRENT DESIGN AND INSTALLATION GUIDE.

2. CSR HEBEL IS NOT IN A POSITION TO ASSESS THE FULL RANGE OF FACTORS THAT CAN INFLUENCE THE REQUIRED DESIGN OF ANY PARTICULAR PROJECT AND THE INTERPLAY BETWEEN THE DESIGN DETAILS SHOWN HERE AND OTHER ELEMENTS OF THE OVERALL PROJECT DESIGN. YOUR PROJECT ENGINEER SHOULD REVIEW THE MATERIAL REFERRED TO ABOVE AND DETERMINE THE SUITABILITY OF THIS SYSTEM FOR INCLUSION IN THE PROJECT DESIGN.

KEY ASSUMPTIONS AND REQUIREMENTS:

1. BACKING ROD SHALL BE SET WITHIN THE JOINT TO ALLOW SUFFICIENT DEPTH OF SEALANT TO BE APPLIED THE JOINT.

2. ALL ELEMENTS TO BE SUPPORTED BY WALL SHALL BE CONNECTED TO THE STRUCTURAL STEEL FRAMING. NO LOADS ARE TO BE CARRIED BY HEBEL POWERPANEL CLADDING.

3. PARAPET CAPPING SHALL BE DESIGNED AND FASTENED IN ACCORDANCE WITH SAA - HB39 1997 - INSTALLATION CODE FOR METAL ROOFING AND WALL CLADDING. STOP ENDS SHALL BE INCORPORATED TO ALL FLASHINGS.



CSR BUILDING PRODUCTS LTD
Head Office: Tintiri 3, 38 DELHI RD, NORTH RYDE NSW 2113
LOCKED BAG 1345, NORTH RYDE BC NSW 1670
A.B.N. 55 008 631 356 Ph: 1300 369 448
www.hiebelaustralia.com.au

hebel
The better way to build
CSR Building Products Limited
A.B.N. 55 008 631 356

112 Wilson
Som
Phong
Fax

412 Wisemans Ferry Road
Somersby, NSW 2550
Phone: (02) 4340 3366
Fax: (02) 4340 3300

FIGURE	HIGH RISE MULTIRESIDENTIAL FACADES			
3.25 - 3.26	CONSTRUCTION DETAILS			
	SCALE	SHEET SIZE	DRAWN	DATE
DESIGN QUOTE REFERENCE	1:5 @ A3	A3		
		SHEET NO.	CHECK	REVISION
		17 of 17		