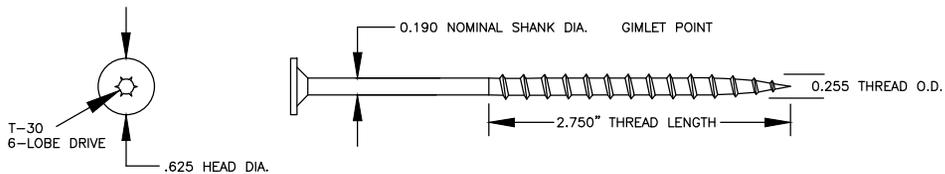
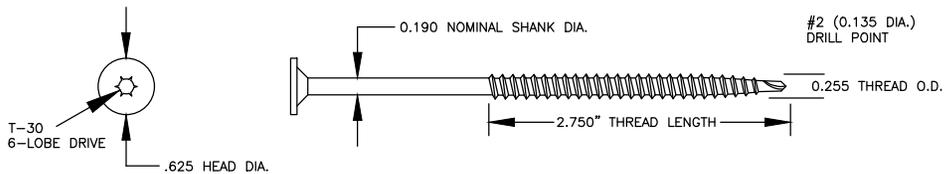


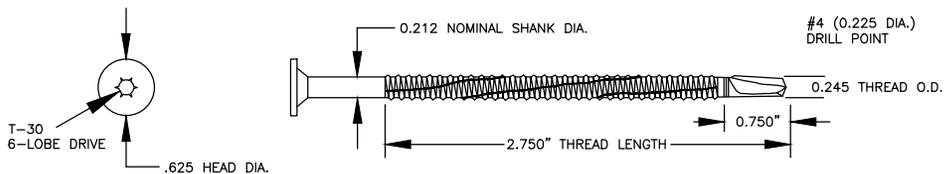
SIPTP THREAD POINT



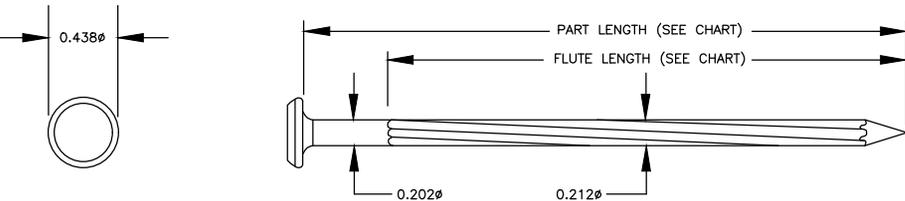
SIPLD LIGHT DUTY DRILL POINT



SIPHD HEAVY DUTY DRILL POINT



TRU-GRIP FLUTED CONCRETE NAIL



R2+ BASE FASTENERS
SUPPLY INFO:

PRODUCT SPECIFICATIONS

MATERIAL:	CASE HARDENED AND TEMPERED CARBON STEEL
HEAD STYLE/DRIVE:	PANCAKE HEAD WITH T-30 INTERNAL DRIVE
HEAD DIAMETER:	0.625"
NOMINAL SHANK DIAMETER:	SIPTP AND SIPLD: 0.190" SIPHD: 0.212"
THREAD LENGTH:	SIPTP AND SIPLD: 2.750" SIPHD: 0.3.875" * 3" AND LONGER FASTENERS 2" AND 2½" FASTENERS ARE FULL THREAD
OVERALL LENGTHS:	SIPTP: 2" THRU 18" SIPLD: 3" THRU 18" SIPHD: 6" THRU 13¾"
POINT:	SIPTP: GIMLET THREAD SIPLD: #2 (0.135" DIA.) DRILL POINT SIPHD: #4 (0.225" DIA.) DRILL POINT
COATING:	EPOXY E-COAT (BLACK) PASSES MORE THAN 15 CYCLES (KASTERMICH) IN ACCORDANCE WITH DIN 50012



TRUFAST SALES & SERVICE
PHONE: 800.443.9602 FAX: 419.633.1048
EMAIL: SALES@TRUFAST.COM

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R2+® BASE SYSTEM

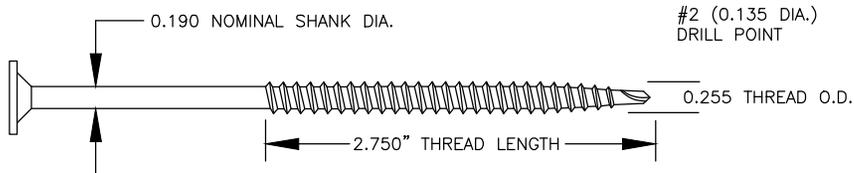
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R2+ BASE FASTENERS –
SPECIFICATION & PROPERTIES

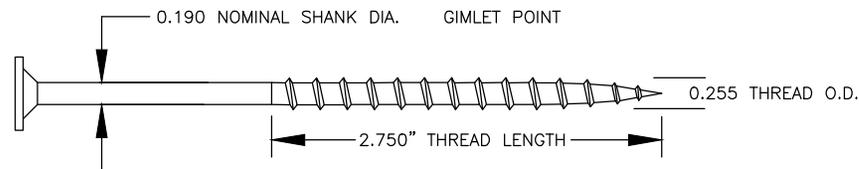
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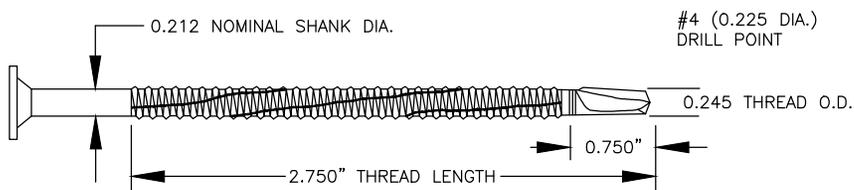
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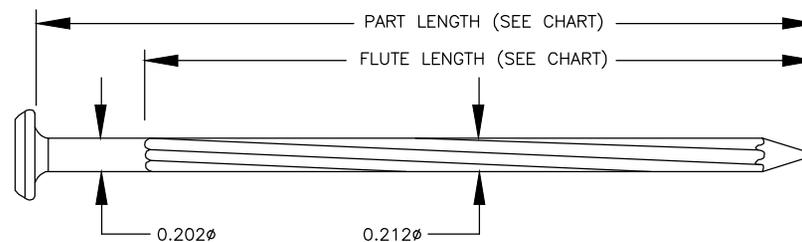
TRUFast SIP LD
#2 (0.135 DIA.) DRILL POINT FASTENER



TRUFast SIP TP
GIMLET THREAD POINT FASTENER



TRUFast SIP HD
#4 HEAVY DUTY DRILL POINT FASTENER



TRUFast TRU-GRIP
FLUTE CONCRETE NAIL

SUBSTRATE	FASTENER	REQUIREMENTS
20 GAUGE OR THINNER STEEL MEMBERS	TRUFast SIP LD	PILOT HOLE NOT REQUIRED. PENETRATE MIN. 3 THREADS PAST WEB
18 GAUGE OR THICKER STEEL MEMBERS	TRUFast SIP LD	$\frac{3}{16}$ " PILOT HOLE REQUIRED. SCREW SHALL PENETRATE MIN. 3 THREADS PAST WEB
MAX. $\frac{3}{16}$ " THICKNESS STEEL MEMBERS	TRUFast SIP HD	PILOT HOLE NOT REQUIRED. PENETRATE MIN. 3 THREADS PAST WEB
WOOD STUDS OR BLOCKING	TRUFast SIP TP	PILOT HOLE NOT REQUIRED. SCREW SHALL PENETRATE STUD MIN. $1\frac{1}{2}$ "
CONCRETE MASONRY UNIT (CMU)	TRUFast SIP LD	$\frac{3}{16}$ " PILOT HOLE REQUIRED, $\frac{1}{2}$ " DEEPER THAN FASTENER PENETRATION. FASTENER SHALL PENETRATE SUBSTRATE MIN. $1\frac{1}{2}$ "
CONCRETE	TRUFast TRU-GRIP FLUTED CONCRETE NAILS	

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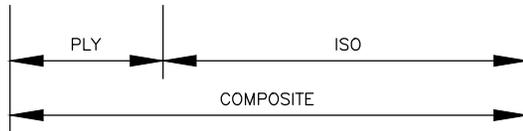
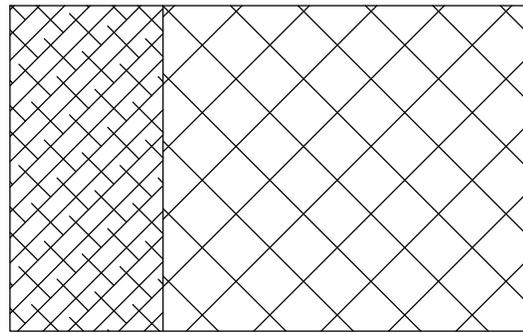
BA-0A.2

R2+[®] BASE SYSTEM

R2+ BASE FASTENERS – SELECTION INFORMATION



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R2+ BASE SECTION

COMPONENT THICKNESS		COMPOSITE THICKNESS	R-VALUE*	COMPOSITE WEIGHT (LB/FT ²)
ISO FOAM (20 OR 25 PSI)	FIRE-TREATED PLYWOOD			
1"	5/8"	1.625"	6.8	2.422
1.5"	5/8"	2.125"	9.8	2.511
2"	5/8"	2.625"	12.9	2.600
2.5"	5/8"	3.125"	16.1	2.679
3"	5/8"	3.625"	19.3	2.759
3.5"	5/8"	4.125"	22.5	2.848
4"	5/8"	4.625"	25.8	2.937

* UNITS: °F·ft²·h/Btu. TESTED AT 75°F MEAN TEMPERATURE AS PER ASTM C 518 ACCORDING TO THE REQUIREMENTS OF ASTM C 1289

R2+ BASE MEETS ASTM C 1289, TYPE V
 COATED-GLASS FACED POLYISOCYANURATE FOAM INSULATION LAMINATED ONE SIDE WITH
 APA-TECO EXPOSURE RATED 5/8" THICKNESS OR 3/4" THICKNESS FIRE-TREATED PLYWOOD

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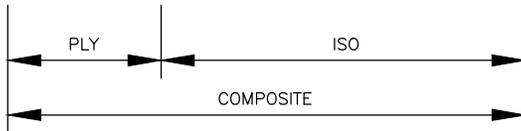
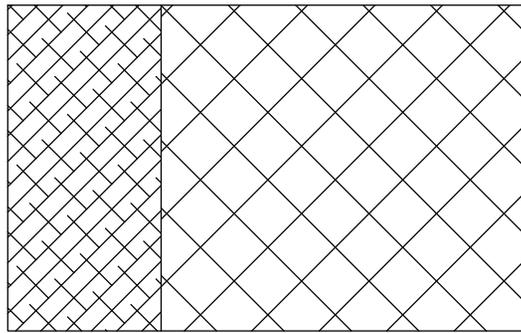
BA-OB.1

R2+® BASE SYSTEM

R2+ BASE W/ 5/8" PLY WEIGHT,
 DIMENSIONS AND R-VALUE



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R2+ BASE SECTION

COMPONENT THICKNESS		COMPOSITE THICKNESS	R-VALUE*	COMPOSITE WEIGHT (LB/FT ²)
ISO FOAM (20 OR 25 PSI)	FIRE-TREATED PLYWOOD			
1"	3/4"	1.75"	7.0	2.726
1.5"	3/4"	2.25"	10.0	2.813
2"	3/4"	2.75"	13.1	2.902
2.5"	3/4"	3.25"	16.3	2.989
3"	3/4"	3.75"	19.5	3.076
3.5"	3/4"	4.25"	22.7	3.164
4"	3/4"	4.75"	26.0	3.251

* UNITS: *F_xft²xh/Btu. TESTED AT 75°F MEAN TEMPERATURE AS PER ASTM C 518 ACCORDING TO THE REQUIREMENTS OF ASTM C 1289

R2+ BASE MEETS ASTM C 1289, TYPE V
 COATED-GLASS FACED POLYISOCYANURATE FOAM INSULATION LAMINATED ONE SIDE WITH
 APA-TECO EXPOSURE RATED 5/8" THICKNESS OR 3/4" THICKNESS FIRE-TREATED PLYWOOD

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 BA-OB.2

R2+[®] BASE SYSTEM
 R2+ BASE W/ 3/4" PLY WEIGHT,
 DIMENSIONS AND R-VALUE



CCW FIRE RESIST MEMBRANE	DRY THICKNESS	WEIGHT
705-FR-A	40 MILS (0.040")	0.30 LB/SQ FT
BARRITECH VP/ VP LT		0.41 LB/SQ FT
BARRITECH NP		0.29 LB/SQ FT
705 VP	23 MILS (0.023")	0.03 LB/SQ FT

FLASHING TAPE/ ACCESSORY	THICKNESS	WEIGHT
P/S ELASTOFORM	90 MILS (0.090")	0.60 LB/SQ FT
PRE-KLEENED EPDM TWF	45 MILS (0.045")	0.28 LB/SQ FT
CCW-705, CCW-705-TWF	40 MILS (0.040")	0.27 LB/SQ FT
ALUMAGRIP 701	30 MILS (0.030")	0.24 LB/SQ FT
FOIL-GRIP 1402	17 MILS (0.017")	0.17 LB/SQ FT
SURE-SEAL SecurTAPE	30 MILS (0.030")	0.20 LB/SQ FT
SEALANTS: CCW-LM-800XL, CCW-201, SURE-SEAL LAP SEALANT	N/A (SEALANT)	11 LB/GAL (DRY) 0.09 LB/FL OZ (DRY)
SURE-SEAL TERMINATION BAR	98 MILS (0.098")	0.015 LB/LIN FT

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R2+® BASE SYSTEM

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CCW MEMBRANES & ACCESSORIES:
WEIGHT AND THICKNESS

BA-0B.3



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WALL COMPONENT	MATERIAL OPTIONS
<p>A. BASE WALL – USE 1, 2, 3 OR 4</p> <p>ALSO COMPLY WITH STUD REQUIREMENTS FOR FASTENING R2+ BASE AND CLADDING.</p>	<ol style="list-style-type: none"> 1) CONCRETE CAST – IN PLACE OR TILT-UP 2) CONCRETE MASONRY UNIT (CMU) 3) STEEL STUDS – 25 GAUGE OR THICKER, 3$\frac{5}{8}$" DEPTH MIN., SPACED 24" O.C. MAX <ol style="list-style-type: none"> A. 5$\frac{8}{8}$" TYPE X GYPSUM WALLBOARD INTERIOR B. LATERAL BRACING REQUIRED EVERY 4 FT. 4) FIRE-RETARDANT TREATED WOOD (FRTW) STUDS, NOMINAL 2X4 DIMENSION, 24" O.C. MAX <ol style="list-style-type: none"> A. 5$\frac{8}{8}$" TYPE X GYPSUM WALLBOARD INTERIOR B. LATERAL BRACING REQUIRED BY CODE
<p>FIRE STOPPING AT FLOOR LINES</p>	<ol style="list-style-type: none"> 1) ANY APPROVED MINERAL FIBER BASED SAFING INSULATION IN EACH STUD CAVITY AT FLOOR LINE. SAFING THICKNESS MUST MATCH STUD CAVITY DEPTH. 2) SOLID FRTW FIRE BLOCKING AT FLOOR LINE IN ACCORDANCE WITH REQUIREMENTS FOR TYPE III CONSTRUCTION.
<p>B. STUD CAVITY INSULATION – USE EITHER: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 OR 11</p> <p>ITEMS 3, 8, 9, 10 & 11 MAY ONLY BE USED WITH EXTERIOR SHEATHING 2</p>	<ol style="list-style-type: none"> 1) NONE 2) 1$\frac{1}{2}$" (MIN.) OF CARLISLE SPI SEALTITE PRO (UP TO FULL CAVITY THICKNESS) 3) 1$\frac{1}{2}$" (MIN.) OF BASF WALLTITE SPF (UP TO FULL CAVITY THICKNESS) 4) ANY NONCOMBUSTIBLE INSULATION PER ASTM E136 5) ANY MINERAL FIBER (BOARD TYPE CLASS A ASTM E84, FACED OR UNFACED) 6) ANY FIBERGLASS (BATT TYPE CLASS A ASTM E84, FACED OR UNFACED) 7) ANY FOAM PLASTIC INSULATION (SPF OR BOARD TYPE) WHICH HAS BEEN TESTED PER ASTM E1354 (AT A MINIMUM OF 20 kW/M² HEAT FLUX) AND SHOWN BY ANALYSIS TO BE LESS FLAMMABLE (IMPROVED T_{IGN}, Pk. HRR) THAN CARLISLE SPI SEALTITE PRO OR BASF WALLTITE. 8) NCFI INSULBLOC SPF (UP TO FULL CAVITY THICKNESS) 9) ICYNENE PROSEAL(MD-C-200v3) UP TO 5$\frac{1}{2}$"(ONLY WITH 1$\frac{1}{2}$" (MIN.) EXTERIOR GYPSUM SHEATHING 10) SWD URETHANE QUICK-SHIELD 112 UP TO 6" IN 6" (MAX.) STUD CAVITIES WITH AN AIR GAP NOT EXCEEDING 2$\frac{1}{2}$". 11) 1$\frac{1}{2}$" (MIN.) THERMOSEAL 2000 (UP TO FULL CAVITY THICKNESS)
<p>C. EXTERIOR SHEATHING OVER STUD BASE WALL – USE 1, 2, OR 3</p>	<ol style="list-style-type: none"> 1) NONE (ONLY WITH CAVITY INSULATION 1, 2, 4, 5 OR 6) – ALSO SEE NOTE FOR STUD CAVITY INSULATION 2) 1$\frac{1}{2}$" OR THICKER EXTERIOR GYPSUM SHEATHING 3) 1$\frac{1}{2}$" (MIN.) FRTW STRUCTURAL PANELS IN TYPE III CONSTRUCTION
<p>D. WRB OVER BASE WALL SURFACE – USE 1, 2, 3, 4 OR 5</p>	<ol style="list-style-type: none"> 1) FIRE-RESIST BARRITECH VP 2) FIRE-RESIST BARRITECH NP/NP-LT 3) BARRITHANE VP 4) 705VP WITH CAV-GRIP, TRAVEL-TACK OR 702 WB PREP 5) 705FR-A/705FR-A XLT WITH CCW-702, 702 LV, CAV-GRIP OR TRAVEL-TACK PREP

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

R2+[®] BASE SYSTEM

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BA-OC.1

R2+ BASE NFPA 285 TABLE OF SUBSTITUTIONS



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WALL COMPONENT	MATERIAL OPTIONS
E. R2+ BASE EXTERIOR NAIL BASE INSULATION USE 1 OR 2	1) 4.25" (MAX.) R2+BASE (R2+BASE (CLASS A)(3½" FOAM MAX., 3/4" FR PLYWOOD MAX.) WITH ALL CLADDINGS LISTED 2) 4.75" (MAX.) R2+BASE (R2+BASE (CLASS A)(4" FOAM MAX., 3/4" FR PLYWOOD MAX.) MAY BE USED WITH CLADDINGS 1-6
F. WRB OVER PLYWOOD FACE OF R2+ BASE USE 1, 2, 3, 4, 5 OR 6	1) FIRE-RESIST BARRITECH VP 2) FIRE-RESIST BARRITECH NP/NP-LT 3) BARRITHANE VP 4) 705VP WITH CAV-GRIP, TRAVEL-TACK OR 702 WB PREP 5) 705FR-A/705FR-A XLT WITH CCW-702, 702 LV, CAV-GRIP OR TRAVEL-TACK PREP 6) CCW-705 RS
G. EXTERIOR CLADDING – USE 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 OR 17. ITEM 9 MAY USE ANY TESTED/APPROVED INSTALLATION TECHNIQUE. ITEM 10, 11 AND 14 MAY USE ANY STANDARD INSTALLATION TECHNIQUE	1) BRICK – NOMINAL 4" CLAY OR CONCRETE BRICK OR VENEER WITH MAXIMUM 2" AIR GAP BEHIND THE BRICK. BRICK TIES/ANCHORS 24" O.C. (MAX). 2) STUCCO – MINIMUM ¾" THICK EXTERIOR CEMENT PLASTER AND LATH. FOR SYSTEMS WHICH REQUIRE A MORE DURABLE WRB SYSTEM, ANY BUILDING WRAP OF 15# FELT THAT MEETS REQUIREMENT #11 IN "WRB OVER EXTERIOR INSULATION" CAN BE USED AS A SLIP SHEET BETWEEN THE WRB/EXTERIOR INSULATION AND THE LATH. 3) LIMESTONE – MINIMUM 2" THICK USING ANY STANDARD NON-OPEN JOINT INSTALLATION TECHNIQUE SUCH AS SHIPLAP. 4) NATURAL STONE VENEER – MINIMUM 2" THICK USING ANY STANDARD NON-OPEN JOINT INSTALLATION TECHNIQUE SUCH AS SHIPLAP. 5) CAST ARTIFICIAL STONE – MINIMUM 1½" THICK COMPLYING WITH ICC-ES AC 51 USING ANY STANDARD NON-OPEN JOINT INSTALLATION TECHNIQUE SUCH AS SHIPLAP. 6) TERRA COTTA CLADDING – MINIMUM 1 1/4" THICK (SOLID OR EQUIVALENT BY WEIGHT) USING ANY STANDARD NON-OPEN JOINT INSTALLATION TECHNIQUE SUCH AS SHIPLAP. 7) THIN BRICK/CULTURED STONE SET IN THIN SET ADHESIVE AND METAL LATH THAT HAS BEEN TESTED TO ASTM E119 (BRICK EXPOSED TO FURNACE) AND REMAINS IN PLACE FOR A MINIMUM OF 30 MINUTES, OR HAS PASSED AN NFPA 285 TEST. MINIMUM 3/4" FOR THESE SYSTEMS WHICH REQUIRE A MORE DURABLE WRB SYSTEM, ANY BUILDING WRAP OR 15# FELT THAT MEETS REQUIREMENT #11 IN "WRB OVER EXTERIOR INSULATION" CAN BE USED AS A SLIP SHEET 8) GLEN GERY THIN TECH ELITE SERIES MASONRY VENEER OR TABS II PANEL SYSTEM WITH 12' THICK BRICKS USING TABS WALL ADHESIVE OR BRICK IT MCS & CI PANEL SYSTEMS 9) ANY MCM THAT HAS SUCCESSFULLY PASSED NFPA 285. 10) UNINSULATED SHEET METAL BUILDING PANELS INCLUDING STEEL, COPPER, ALUMINUM. 11) 1/4" (MIN.) UNINSULATED FIBER-CEMENT SIDING OR PORCELAIN OR CERAMIC TILE MECHANICALLY ATTACHED.

(CONTINUED ON BA-0C.3)

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R2+® BASE SYSTEM

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R2+ BASE NFPA 285

BA-0C.2

TABLE OF SUBSTITUTIONS



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WALL COMPONENT

MATERIAL OPTIONS

G. EXTERIOR CLADDING – USE 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 OR 17.

(CONTINUED FROM BA-0C.2)

- 12) STONE, PORCELAIN, CERAMIC/ALUMINUM HONEYCOMB COMPOSITE BUILDING PANELS THAT HAVE SUCCESSFULLY PASSED NFPA 285 CRITERIA.
- 13) AUTOCLAVED-AERATED-CONCRETE (AAC) PANELS THAT HAVE SUCCESSFULLY PASSED NFPA 285 CRITERIA.
- 14) TERRA COTTA CLADDING – ANY RAIN SCREEN TERRA COTTA (MIN. 1/2” THICK) WITH VENTILATED SHIPLAP.
- 15) 1/2” STUCCO – ANY ONE COAT STUCCO (1/2” MIN.) WHICH MEETS AC11 ACCEPTANCE CRITERIA OR IS APPROVED FOR USE IN TYPE I-IV CONSTRUCTION OR HAS BEEN TESTED PER NFPA 285 OR STAYS IN PLACE WHEN TESTED PER ASTM E119 (STUCCO EXPOSED TO FIRE) FOR AT LEAST 30 MINUTES.
- 16) NATURAL STONE VENEER – MINIMUM 1 1/4” THICK USING ANY STANDARD INSULATION TECHNIQUE.
- 17) FUNDERMAX M. LOOK GREY CORE – MINIMUM 1/4” THICK USING ANY STANDARD INSULATION TECHNIQUE.

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R2+® BASE SYSTEM

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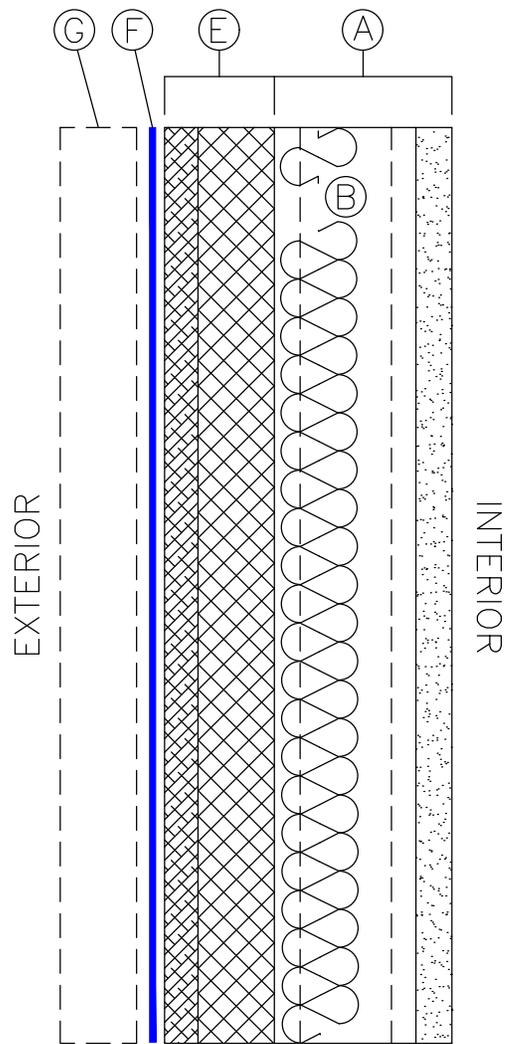
R2+ BASE NFPA 285

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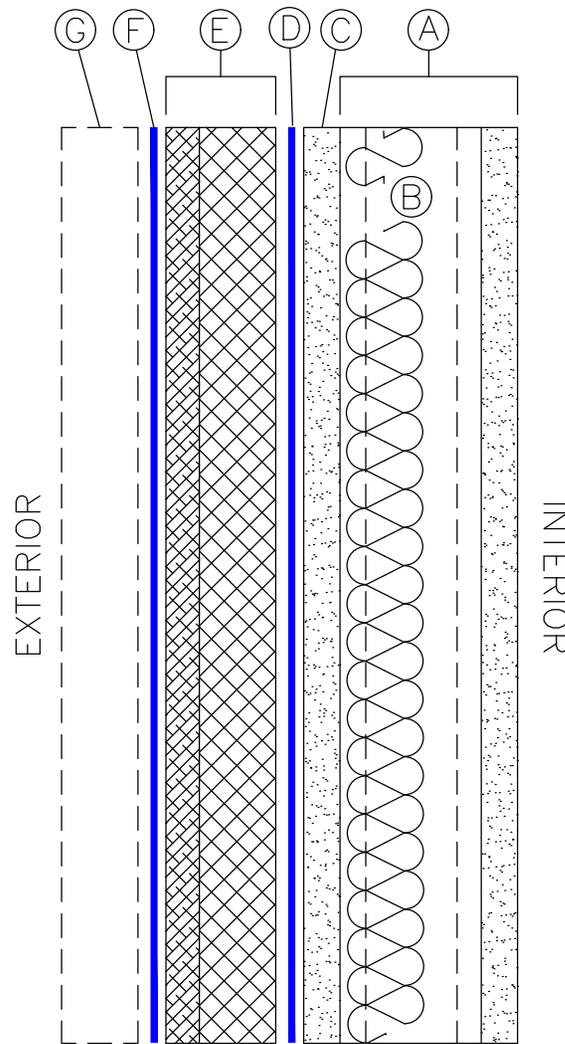
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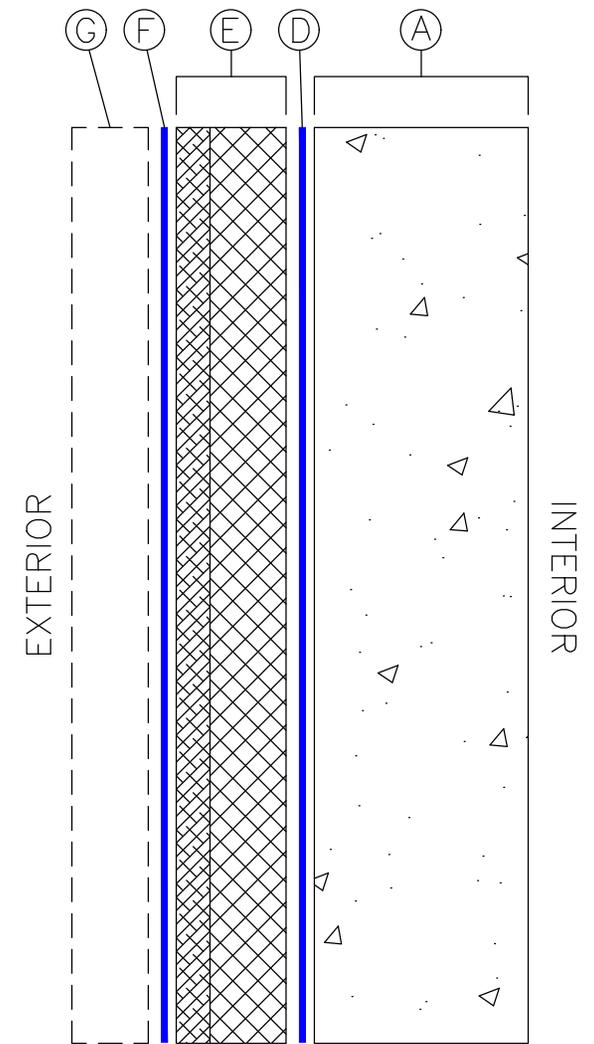
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R2+ BASE
DIRECTLY OVER
STUDS



R2+ BASE OVER
EXTERIOR SHEATHING/
STUD WALL



R2+ BASE OVER
MASS WALL

NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

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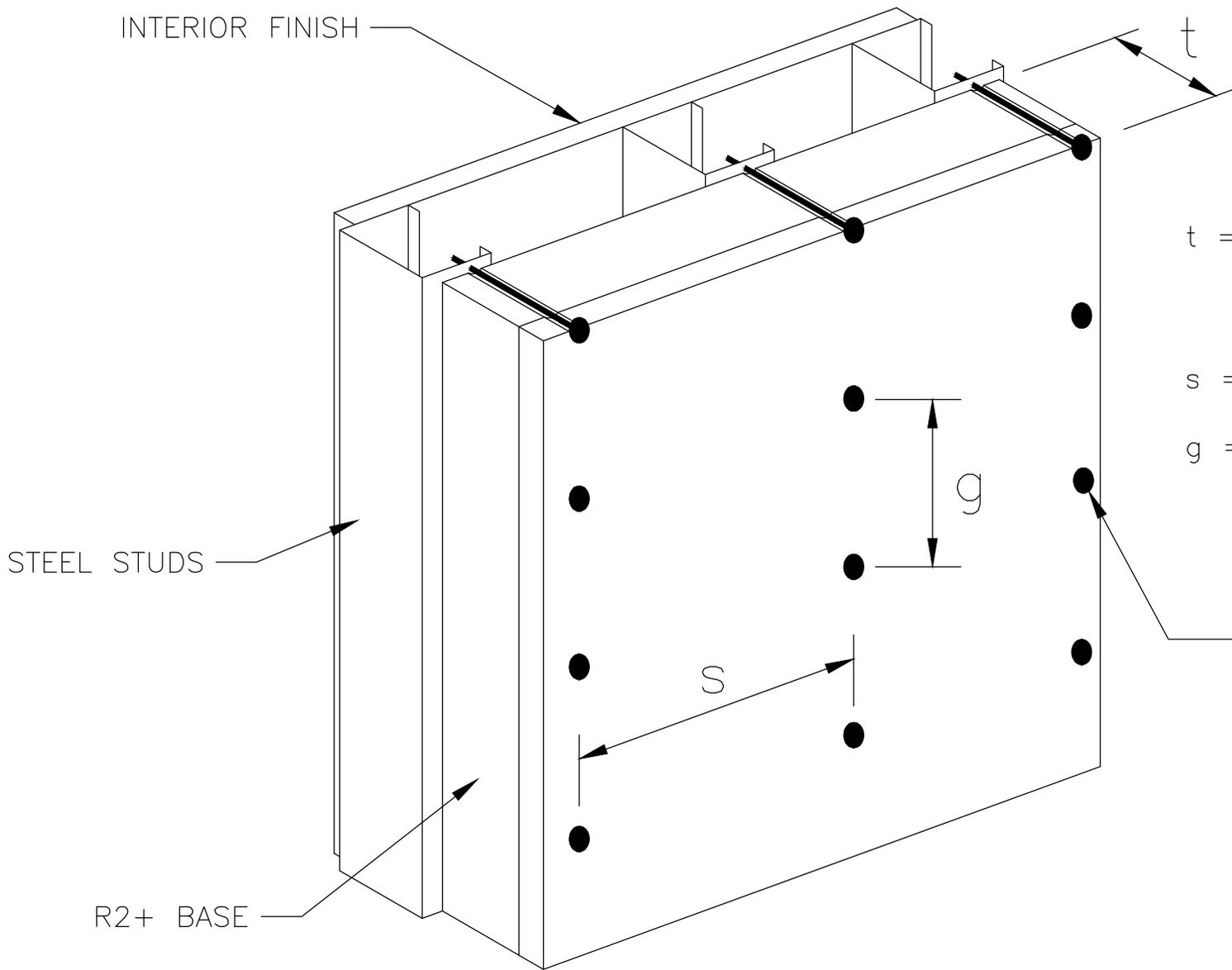
BA-0C.4

R2+[®] BASE SYSTEM

R2+ BASE NFPA 285
TABLE OF SUBSTITUTIONS



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t = THICKNESS OF R2+ BASE
(REF. BA-0B.1, BA-1A.3
& BA-1A.4)

s = STUD SPACING

g = VERTICAL SPACING
(REF. BA-1A.3 & BA-1A.4)

FASTENERS FOR STEEL
STUDS (REF. BA-0A)

NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN
NFPA 285 WALL ASSEMBLIES. USE WALL
ASSEMBLY COMPONENTS AS LISTED IN BA-0B
AND BA-0C.

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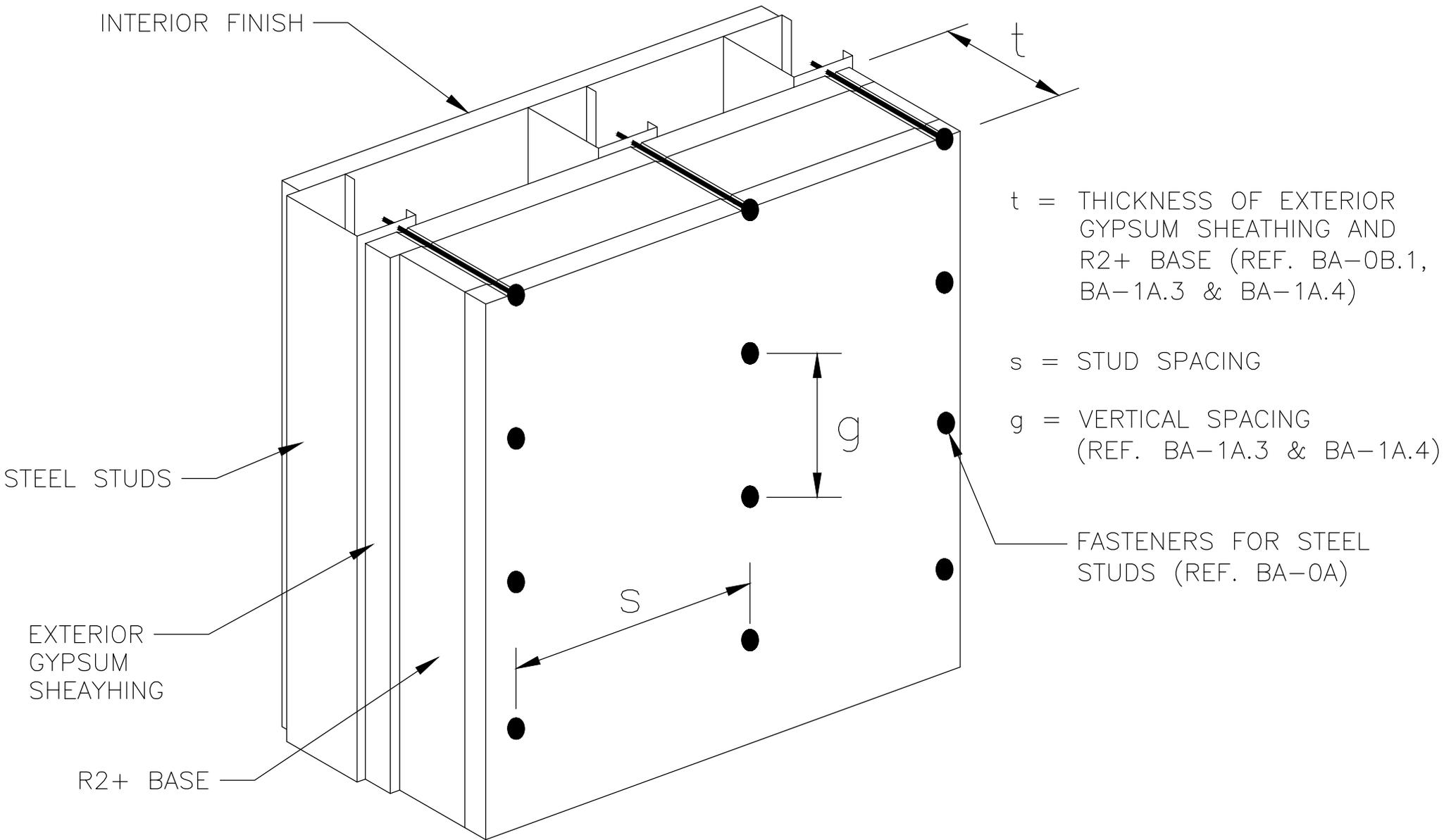
BA-1A.1

R2+® BASE SYSTEM

R2+ BASE ATTACHMENT TO STEEL STUDS



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NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

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R2+[®] BASE SYSTEM

R2+ BASE ATTACHMENT TO STEEL STUDS THROUGH GYPSUM SHEATHING

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BA-1A.2



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RECOMMENDED FASTENER SPACING FOR SIP LD SCREWS WHEN USED TO SUPPORT THE SHEAR LOAD OF VARIOUS INSULATION THICKNESSES AND ASSEMBLY WEIGHTS INTO COLD-FORMED STEEL FRAMING (0.0346" MINIMUM THICKNESS 20 GA.)^{1,2}

HORIZONTAL FASTENER SPACING, s (IN. O.C.)	INSULATION ASSEMBLY THICKNESS, ³ t (IN.)	SHEAR STRENGTH ⁴ v (LBF/FASTENER)	VERTICAL FASTENER SPACING, g (IN. O.C.)							
			MAXIMUM INSULATION ASSEMBLY WEIGHT TO BE SUPPORTED ^{7,8,9} (PSF)							
			5	7.5	10	15	20	25	30	
16"	1	12.5	16"	16"	16"	16"	16"	16"	16"	12"
	1.5	9.0	16"	16"	16"	16"	12"	8"	8"	8"
	2	6.9	16"	16"	16"	12"	8"	6"	6"	6"
	3	4.9	16"	16"	12"	8"	6"	4"	4"	4"
	4	3.7	16"	12"	8"	6"	4"	4"	2"	2"
	5	3.0	16"	8"	8"	4"	4"	2"	2"	2"
	6	2.5	12"	8"	6"	4"	2"	2"	2"	2"
24"	1	12.5	16"	16"	16"	16"	12"	8"	8"	8"
	1.5	9.0	16"	16"	16"	12"	8"	6"	6"	6"
	2	6.9	16"	16"	12"	8"	6"	4"	4"	4"
	3	4.9	16"	12"	8"	6"	4"	2"	2"	2"
	4	3.7	12"	8"	6"	4"	2"	2"	2"	2"
	5	3.0	8"	6"	4"	2"	2"	2"		
	6	2.5	8"	6"	4"	2"	2"			

NOTE: REFER TO FASTENING NOTES BA-1A.5
 REF:NTA INC. ENGINEERING EVALUATION REPORT
 FOR TRUFAST, REPORT NO TRU110910-21
 REV-1/29/2020

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BA-1A.3

R2+® BASE SYSTEM

R2+ BASE FASTENERS SPACING,
 ATTACHMENT TO STEEL STUDS



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ALLOWABLE WIND PRESSURE AND MAXIMUM WIND SPEED FOR SIP LD SCREW INTO COLD-FORMED STEEL BASED ON FASTENER SPACING AND WIND EXPOSURE ^{1,2,3}

STEEL DESIGN THICKNESS (IN.)	HORIZONTAL FASTENER SPACING, ^s (IN. O.C.)	VERTICAL FASTENER SPACING, ^g (IN. O.C.)	ALLOWABLE WIND PRESSURE, ^p (PSF)	MAXIMUM WIND SPEED (MPH) BASED ON WIND EXPOSURE ⁵					
				ASCE 7-05 IRC, 2006/2009 IBC			ASCE 7-10 2012 IBC		
				B	C	D	B	C	D
0.0346" (20 GA.)	16	16	64.8	145	125	115	185	160	150
		12	86	165	145	135	215	185	170
		8	130	205	180	165	265	230	210
		6	173	235	205	190	305	265	245
		4	259	290	250	235	375	325	300
	24	16	43.2	115	100	95	150	130	120
		12	57.6	135	120	110	175	150	140
		8	86	165	145	135	215	185	170
		6	115	195	165	155	245	215	200
		4	172	235	205	190	305	265	245
0.0451" (18 GA.)	16	16	80.6	160	140	130	205	180	165
		12	108	185	160	150	240	205	195
		8	161	230	200	185	295	255	235
		6	215	265	230	215	340	295	275
		4	323	325	280	265	415	360	335
	24	16	53.8	130	115	105	165	145	135
		12	71.7	150	130	125	195	170	155
		8	108	185	160	150	240	205	195
		6	143	215	185	175	275	240	225
		4	215	265	230	215	340	295	275

NOTE: REFER TO FASTENING NOTES BA-1A.5
 REF:NTA INC. ENGINEERING EVALUATION REPORT
 FOR TRUFAST, REPORT NO TRU110910-21
 REV-1/29/2020

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

R2+® BASE SYSTEM

08/03/2020 | N.T.S.

BA-1A.4

R2+ BASE WIND LOAD RESISTANCE,
 ATTACHMENT TO STEEL STUDS

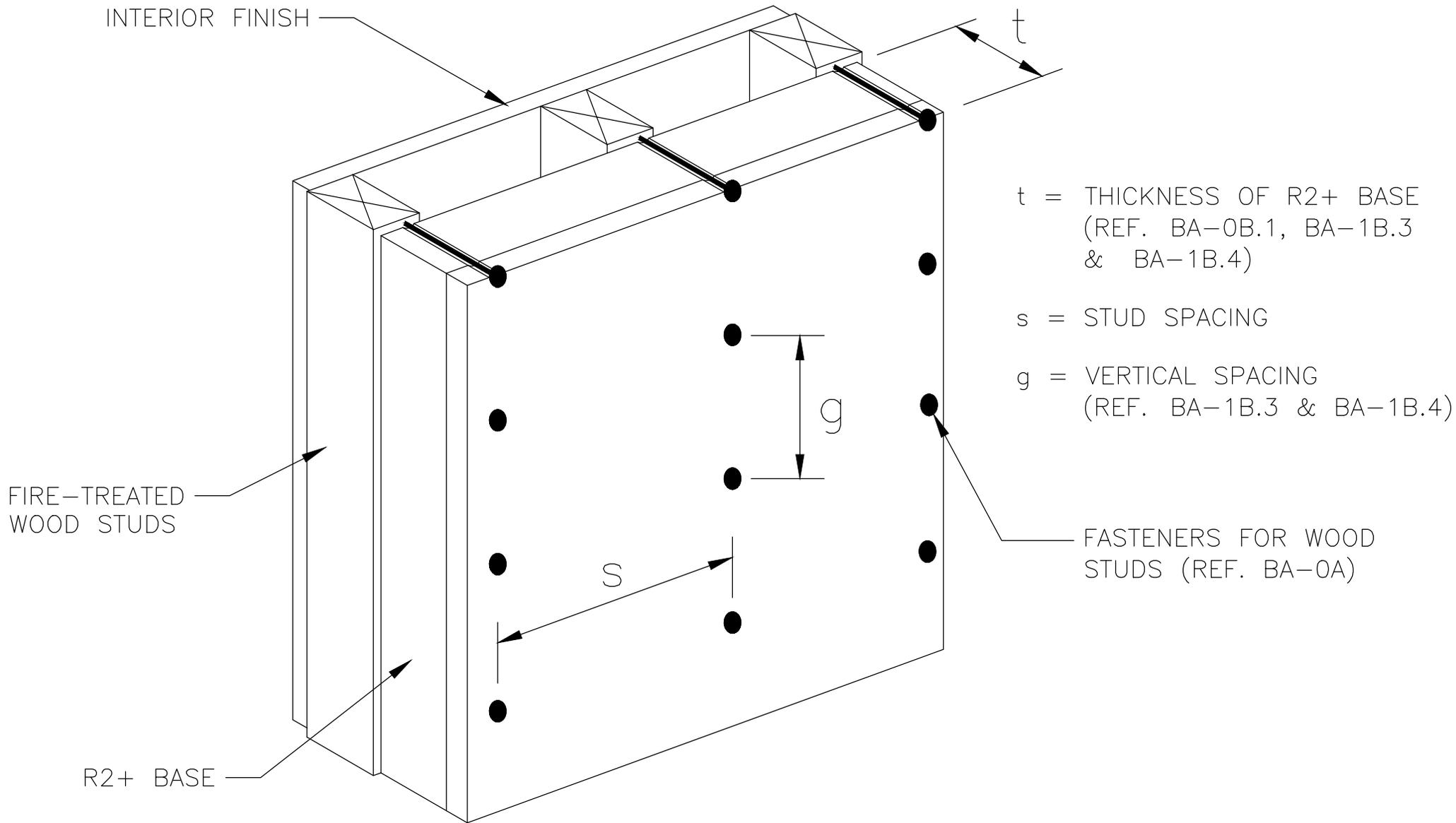


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R2+ BASE ATTACHMENT TO STEEL STUD NOTES:

1. MINIMUM 5/8" THICKNESS FIRE TREATED PLYWOOD FACER OF R2+ BASE SHALL BE INSTALLED FACING THE EXTERIOR TO SERVE AS THE FURRING MATERIAL FOR THE SCREWS. SCREWS SHALL BE DRIVEN HEAD FLUSH WITH R2+ BASE WOOD FACER. STEEL FRAMING TO HAVE A MINIMUM DELIVERED BASE METAL THICKNESS OF 33 MILS (0.0346-INCH DESIGN THICKNESS) AND A MINIMUM TENSILE STRENGTH OF 45.0 KSI. SCREW SHALL HAVE SUFFICIENT LENGTH AND BE INSTALLED SO THAT IT EXTENDS A MINIMUM OF THREE THREADS BEYOND THE INSIDE FACE OF THE STUD FLANGE.
2. TABULATED AREAS DO NOT CONSIDER SECUREMENT OF THE EXTERIOR CLADDING. THIS ITEM MUST BE CONSIDERED INDEPENDENTLY FROM THIS REPORT IN ACCORDANCE WITH ACCEPTED PRACTICE. THE MORE RESTRICTIVE FASTENER SPACING BASED ON THIS REPORT AND THIS CONSIDERATION SHALL APPLY.
3. THESE SCREWS ARE APPROVED FOR INSTALLATION THROUGH R2+ BASE INTO STEEL STUDS. R2+ BASE SHALL BE INSTALLED WITH PLYWOOD FACING EXTERIOR. SCREWS SHALL BE DRIVEN WITH HEAD FLUSH TO PLYWOOD FACE OF R2+ BASE.
4. DETERMINED IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (2005 EDITION) AND AISI S100-2007, NORTH AMERICAN SPECIFICATION FOR DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS.
5. DETERMINED FROM FASTENER HEAD PULL-THROUGH TESTING IN ACCORDANCE WITH ASTM D1037. THE ALLOWABLE PULL-THROUGH FORCE WAS TAKEN AS THE AVERAGE ULTIMATE LOAD DIVIDED BY A FACTOR OF SAFETY OF 5.0 AND A LOAD DURATION FACTOR OF 1.6 (ALLOWABLE PULL-THROUGH STRENGTH = 179 LBF) AND FASTENER PULL-OUT STRENGTH DETERMINED USING THE AISI S100-2007, NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, CHAPTER F (P = 269 (20 GA.) AND P = 449 (18 GA.) WITH = 0.86).
6. THREE-SECOND-GUST WIND SPEED; BASED ON A BUILDING HEIGHT OF 66- FEET, ZONE 5, IMPORTANCE FACTOR, I =1.0 AND TOPOGRAPHIC FACTOR, K =1.0, INTERNAL PRESSURE COEFFICIENT, GC =+/-0.18 IN ACCORDANCE WITH ASCE 7, 2005 EDITION, SECTION 6.4.2.2 (COMPONENT AND CLADDING) ; ASCE 7, 2010 EDITION, SECTION 30.4.2 AND IRC SECTION R301.2.1. PRESSURE EQUALIZATION FACTOR, PEF=1.0.
7. INSULATION ASSEMBLY WEIGHT SHALL INCLUDE ALL MATERIALS SUPPORTED INCLUDING, BUT NOT LIMITED TO, R2+ BASE, WATER-RESISTIVE BARRIER, FLASHINGS, MOUNTING HARDWARE AND EXTERIOR CLADDING.
8. MINIMUM 5/8" THICKNESS FIRE TREATED PLYWOOD FACER OF R2+ BASE SHALL SERVE AS THE MOUNTING SUBSTRATE FOR THE EXTERIOR CLADDING. EXTERIOR CLADDING SYSTEM SHALL BE INSTALLED WITH CODE-COMPLAINT FASTENING AND TECHNIQUE ACCORDING TO CLADDING MANUFACTURER'S AND ARCHITECT'S INSTRUCTIONS.
9. INTERPOLATION BETWEEN TABLE VALUES IS PERMITTED.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.		R2+® BASE SYSTEM		 © 2020 CARLISLE CORPORATION
08/03/2020	N.T.S.	R2+ BASE ATTACHMENT TO		
BA-1A.5		STEEL STUDS NOTES		



NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

R2+® BASE SYSTEM

R2+ BASE ATTACHMENT TO FIRE-TREATED WOOD STUDS

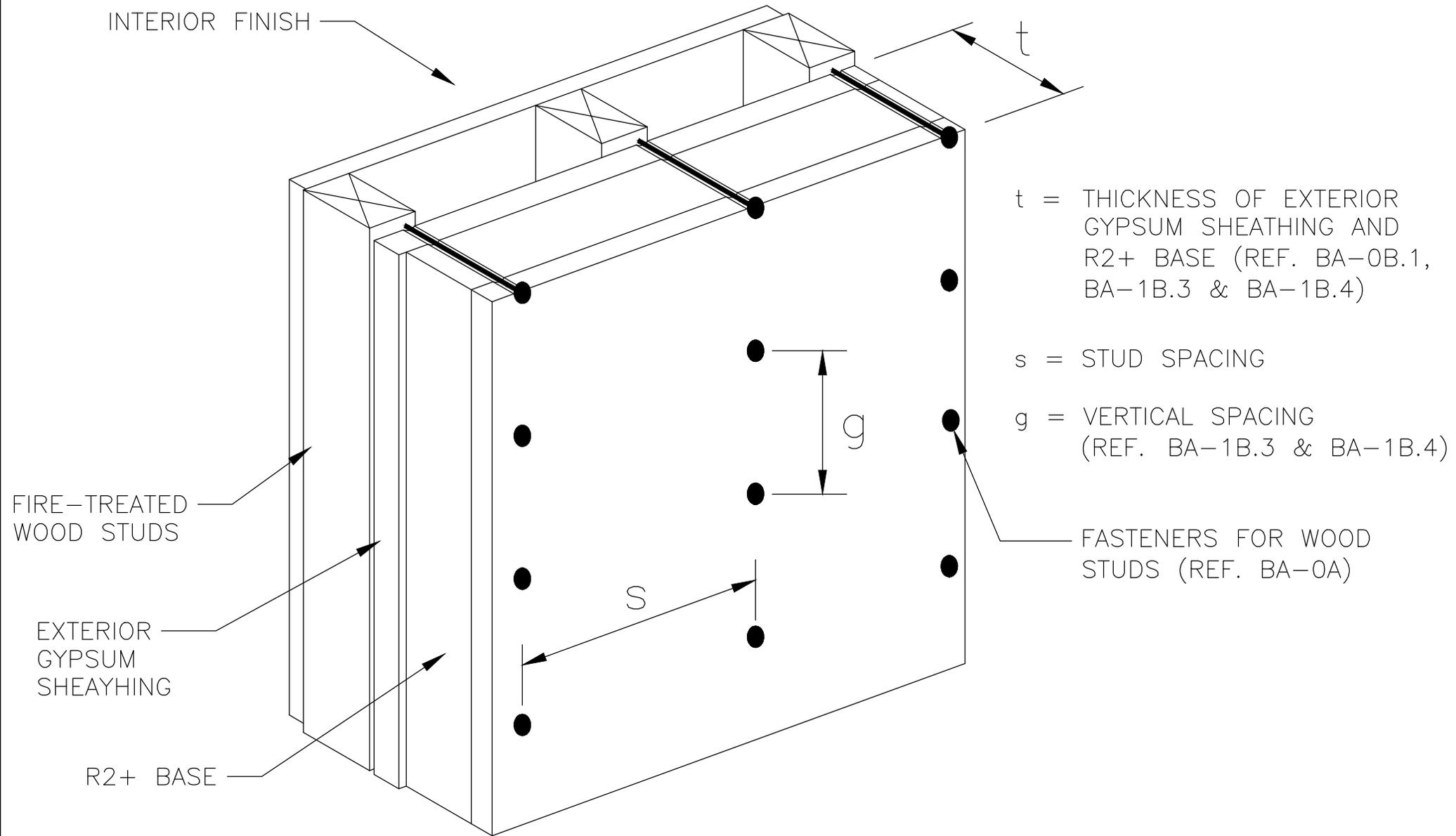


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08/03/2020

N.T.S.

BA-1B.1



NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

R2+[®] BASE SYSTEM

08/03/2020 | N.T.S.

BA-1B.2

R2+ BASE ATTACHMENT TO WOOD STUDS THROUGH GYPSUM SHEATHING



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RECOMMENDED FASTENER SPACING FOR SIP TP AND SIP LD SCREWS WHEN USED TO SUPPORT THE SHEAR LOAD OF VARIOUS INSULATION THICKNESS AND ASSEMBLY WEIGHTS INTO WOOD FRAMING ^{1,2}

HORIZONTAL FASTENER SPACING, _s (IN. O.C.)	INSULATION ASSEMBLY THICKNESS, _t (IN.)	SHEAR STRENGTH _v ⁴ (LBF/FASTENER)	VERTICAL FASTENER SPACING, _g (IN. O.C.)						
			MAXIMUM INSULATION ASSEMBLY WEIGHT TO BE SUPPORTED ^{7,8,9} (PSF)						
			5	7.5	10	15	20	25	30
16	1	49.9	24"	24"	24"	24"	16"	16"	12"
	1.5	37.3	24"	24"	24"	16"	16"	12"	8"
	2	29.6	24"	24"	24"	16"	12"	8"	8"
	3	20.8	24"	24"	16"	12"	8"	6"	6"
	4	16.0	24"	16"	12"	8"	6"	4"	4"
	5	13.0	16"	12"	8"	6"	4"	4"	
24	1	49.9	24"	24"	24"	16"	12"	8"	8"
	1.5	37.3	24"	24"	16"	12"	8"	8"	6"
	2	29.6	24"	16"	16"	8"	8"	6"	4"
	3	20.8	24"	16"	12"	8"	6"	4"	4"
	4	16.0	16"	12"	8"	6"	4"		
	5	13.0	12"	8"	6"	4"			
	6	11.0	12"	8"	6"	4"			

NOTE: REFER TO FASTENING NOTES BA-1A.5
 REF:NTA INC. ENGINEERING EVALUATION REPORT
 FOR TRUFAST, REPORT NO TRU110910-21
 REV-1/29/2020

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

08/03/2020 | N.T.S.

BA-1B.3

R2+® BASE SYSTEM

R2+ BASE FASTENERS SPACING,
 ATTACHMENT TO FIRE-TREATED
 WOOD STUDS



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ALLOWABLE WIND PRESSURE AND MAXIMUM WIND SPEED FOR SIP TP OR SIP LD SCREW INTO WOOD FRAMING BASED ON FASTENER SPACING AND WIND EXPOSURE 1,2,3

HORIZONTAL FASTENER SPACING, s (IN. O.C.)	VERTICAL FASTENER SPACING, g (IN. O.C.)	ALLOWABLE WIND PRESSURE, ⁵ p (PSF)	MAXIMUM WIND SPEED (MPH) BASED ON WIND EXPOSURE					
			ASCE 7-05 IRC, 2006/2009 IBC			ASCE 7-10 2012 IBC		
			B	C	D	B	C	D
16	24	53.8	130	115	105	165	145	135
	16	80.6	160	140	130	205	180	165
	12	108	185	160	150	240	205	195
	8	161	230	200	185	295	255	235
	6	215	265	230	215	340	295	275
	4	323	325	280	265	415	360	335
24	24	35.8	105	90	85	135	115	110
	16	53.8	130	115	105	165	145	135
	12	71.7	150	130	125	195	170	155
	8	108	185	160	150	240	205	195
	6	143	215	185	175	275	240	225
	4	215	265	230	215	340	295	275

NOTE: REFER TO FASTENING NOTES BA-1A.5
 REF:NTA INC. ENGINEERING EVALUATION REPORT
 FOR TRUFAST, REPORT NO TRU110910-21
 REV-1/29/2020

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

R2+[®] BASE SYSTEM

R2+ BASE WIND LOAD RESISTANCE,
 ATTACHMENT TO FIRE-TREATED
 WOOD STUDS



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08/03/2020 | N.T.S.

BA-1B.4

R2+ BASE ATTACHMENT TO FIRE-TREATED WOOD STUD NOTES:

1. MINIMUM 5/8" THICKNESS FIRE TREATED PLYWOOD FACER OF R2+ BASE SHALL BE INSTALLED FACING THE EXTERIOR TO SERVE AS THE FURRING MATERIAL FOR THE SCREWS. SCREWS SHALL BE DRIVEN HEAD FLUSH WITH R2+ BASE WOOD FACER. WOOD FRAMING SHALL HAVE A MINIMUM SPECIFIC GRAVITY, G = 0.42, (SPRUCE-PINE-FIR). SCREW SHALL HAVE SUFFICIENT LENGTH AND BE INSTALLED SO THAT IT PENETRATES THE STUD A MINIMUM OF 1.5-INCHES. THE PLACEMENT OF STRUCTURAL SHEATHING OVER THE FRAMING IS OPTIONAL FOR THE PURPOSES OF THE CONNECTION DESIGNED HEREIN. USE OF SHEATHING OVER THE FRAMING SHALL BE DETERMINED BY THE BUILDING DESIGNER.
2. FOR TABULATED VERTICAL FASTENER SPACING, g: THE MORE RESTRICTIVE FASTENER SPACING BASED ON THIS REPORT SHALL APPLY.
3. THESE SCREWS ARE APPROVED FOR INSTALLATION THROUGH R2+ BASE INTO WOOD STUDS. R2+ BASE SHALL BE INSTALLED WITH PLYWOOD FACING EXTERIOR. SCREWS SHALL BE DRIVEN WITH HEAD FLUSH TO PLYWOOD FACE OF R2+ BASE.
4. DETERMINED IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (2005 EDITION).
5. DETERMINED FROM FASTENER HEAD PULL-THROUGH TESTING IN ACCORDANCE WITH ASTM D1037. THE ALLOWABLE WITHDRAWAL STRENGTH AND PULL-THROUGH STRENGTH WERE TAKEN AS THE AVERAGE ULTIMATE LOAD DIVIDED BY A FACTOR OF SAFETY OF 5.0 AND A LOAD DURATION FACTOR OF 1.6 (ALLOWABLE PULL- THROUGH STRENGTH = 179 LBF, ALLOWABLE WITHDRAWAL STRENGTH = 200 LBF).
6. THREE-SECOND-GUST WIND SPEED; BASED ON A BUILDING HEIGHT OF 66- FEET, ZONE 5, IMPORTANCE FACTOR, I =1.0 AND TOPOGRAPHIC FACTOR, K =1.0, INTERNAL PRESSURE COEFFICIENT, GC =+/-0.18 IN ACCORDANCE WITH ASCE 7, 2005 EDITION, SECTION 6.4.2.2 (COMPONENT AND CLADDING); ASCE 7, 2010 EDITION, SECTION 30.4.2 AND IRC SECTION R301.2.1. PRESSURE EQUALIZATION FACTOR, PEF=1.0.
7. INSULATION ASSEMBLY WEIGHT SHALL INCLUDE ALL MATERIALS SUPPORTED INCLUDING, BUT NOT LIMITED TO, R2+ BASE, WATER-RESISTIVE BARRIER, FLASHINGS, MOUNTING HARDWARE AND EXTERIOR CLADDING.
8. MINIMUM 5/8" THICKNESS FIRE TREATED PLYWOOD FACER OF R2+ BASE SHALL SERVE AS THE MOUNTING SUBSTRATE FOR THE EXTERIOR CLADDING. EXTERIOR CLADDING SYSTEM SHALL BE INSTALLED WITH CODE-COMPLAINT FASTENING AND TECHNIQUE ACCORDING TO CLADDING MANUFACTURER'S AND ARCHITECT'S INSTRUCTIONS.
9. INTERPOLATION BETWEEN TABLE VALUES IS PERMITTED.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

08/03/2020

N.T.S.

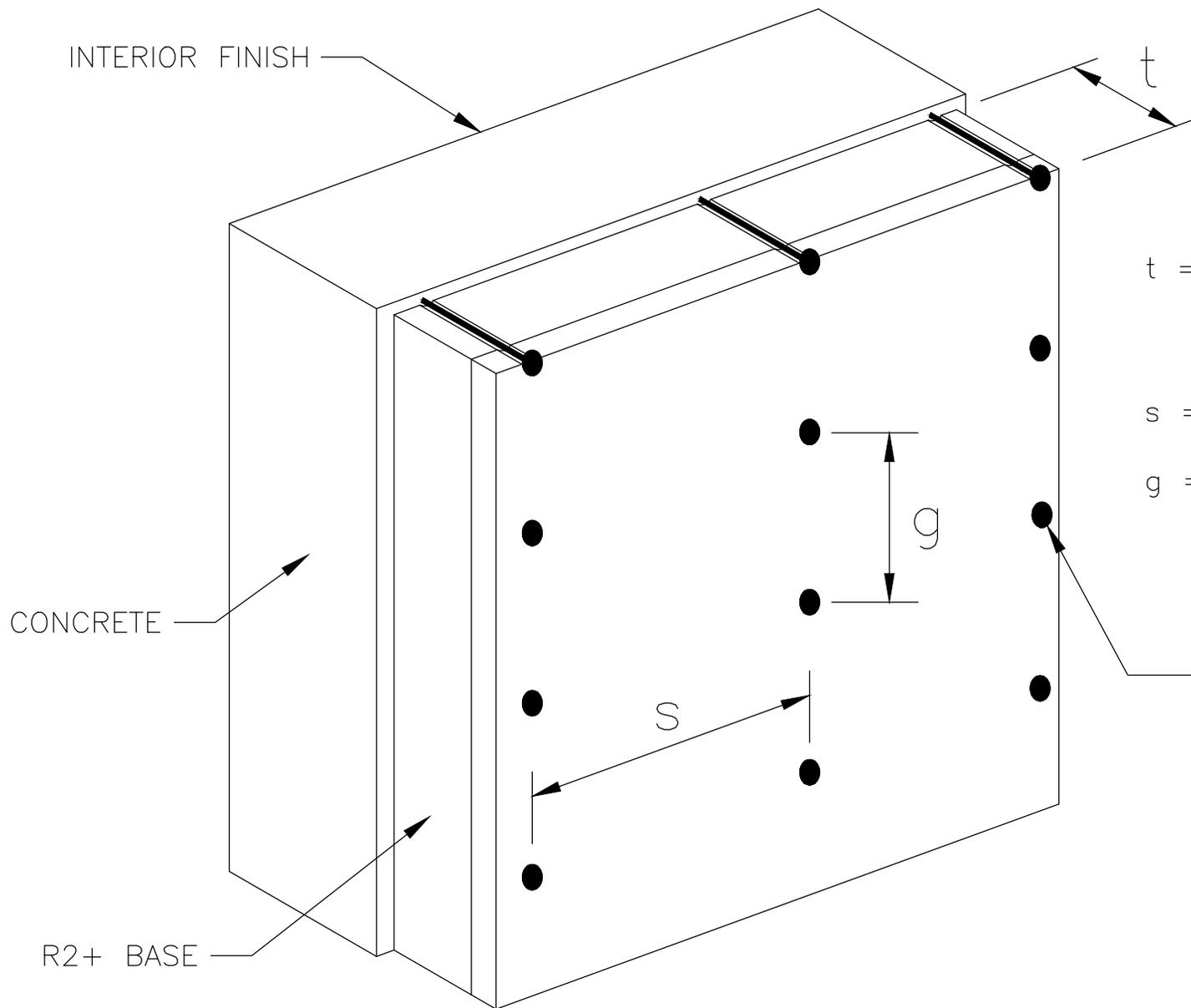
R2+® BASE SYSTEM

BA-1B.5

R2+ BASE ATTACHMENT TO
FIRE-TREATED WOOD STUDS NOTES



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t = THICKNESS OF R2+ BASE
(REF. BA-0B.1, BA-1C.2
& BA-1C.3)

s = HORIZONTAL SPACING

g = VERTICAL SPACING
(REF. BA-1C.2 & BA-1C.3)

FASTENERS FOR CONCRETE
(REF. BA-0A)

NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN
NFPA 285 WALL ASSEMBLIES. USE WALL
ASSEMBLY COMPONENTS AS LISTED IN BA-0B
AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR
R2+ INSULATION INSTALLATION ONLY.

R2+® BASE SYSTEM

R2+ BASE ATTACHMENT TO CONCRETE WALL

08/03/2020

N.T.S.

BA-1C.1



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RECOMMENDED FASTENER SPACING FOR TRUFAST TRU-GRIP FLUTED CONCRETE NAILS WHEN USED TO SUPPORT THE SHEAR LOAD OF VARIOUS INSULATION THICKNESS AND ASSEMBLY WEIGHTS INTO CONCRETE SUBSTRATES^{1,2}

HORIZONTAL FASTENER SPACING, s (IN. O.C.)	INSULATION ASSEMBLY THICKNESS, ³ t (IN.)	SHEAR STRENGTH ⁴ v (LBF/FASTENER)	VERTICAL FASTENER SPACING, g (IN. O.C.)							
			MAXIMUM INSULATION ASSEMBLY WEIGHT TO BE SUPPORTED ^{7,8,9} (PSF)							
			5	7.5	10	15	20	25	30	
16	1	68.4	24"	24"	24"	24"	24"	24"	24"	16"
	1.5	50.6	24"	24"	24"	24"	16"	16"	16"	12"
	2	40.0	24"	24"	24"	16"	16"	12"	8"	8"
	3	28.0	24"	24"	24"	16"	12"	8"	8"	8"
	4	21.4	24"	24"	16"	12"	8"	6"	6"	6"
	5	17.4	24"	16"	12"	8"	6"	6"	4"	4"
	6	14.6	24"	16"	12"	8"	6"	4"	4"	4"
24	1	68.4	24"	24"	24"	24"	16"	16"	16"	12"
	1.5	50.6	24"	24"	24"	16"	12"	12"	8"	8"
	2	40.0	24"	24"	16"	12"	8"	8"	6"	6"
	3	28.0	24"	16"	16"	8"	8"	6"	4"	4"
	4	21.4	24"	16"	12"	8"	6"	4"	4"	4"
	5	17.4	16"	12"	8"	6"	4"	4"		
	6	14.6	16"	8"	8"	4"	4"			

NOTE: REFER TO FASTENING NOTES BA-1A.5
 REF:NTA INC. ENGINEERING EVALUATION REPORT
 FOR TRUFAST, REPORT NO TRU110910-21
 REV-1/29/2020

DETAIL IS INTENDED TO BE A GUIDE FOR
 R2+ INSULATION INSTALLATION ONLY.

R2+® BASE SYSTEM

08/03/2020 | N.T.S.

BA-1C.2

R2+ BASE FASTENERS SPACING,
 ATTACHMENT TO CONCRETE WALL



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ALLOWABLE WIND PRESSURE AND MAXIMUM WIND SPEED FOR TRUFAST TRU-GRIP FLUTED CONCRETE NAIL INTO CONCRETE BASED ON FASTENER SPACING AND WIND EXPOSURE^{1,2,3}

HORIZONTAL FASTENER SPACING, s (IN. O.C.)	VERTICAL FASTENER SPACING, g (IN. O.C.)	ALLOWABLE WIND PRESSURE, ⁵ p (PSF)	MAXIMUM WIND SPEED (MPH) BASED ON WIND EXPOSURE ^{7,8,9}					
			ASCE 7-05 IRC, 2006/2009 IBC			ASCE 7-10 2012 IBC		
			B	C	D	B	C	D
16	24	31.4	100	85	80	125	110	100
	16	47.2	125	105	100	155	135	125
	12	62.9	140	125	115	180	155	145
	8	94.3	175	150	140	225	195	180
	6	126	200	175	165	260	225	210
	4	189	250	215	200	320	275	255
24	24	21	80	70	65	105	90	80
	16	31.4	100	85	80	125	110	100
	12	41.9	115	100	95	145	125	120
	8	62.9	140	125	115	180	155	145
	6	83.8	165	145	135	210	180	170
	4	126	200	175	165	260	225	210

NOTE: REFER TO FASTENING NOTES BA-1A.5
 REF: NTA INC. ENGINEERING EVALUATION REPORT
 FOR TRUFAST, REPORT NO TRU110910-21
 REV-1/29/2020

DETAIL IS INTENDED TO BE A GUIDE FOR
 R2+ INSULATION INSTALLATION ONLY.

R2+[®] BASE SYSTEM

08/03/2020 | N.T.S.

R2+ BASE WIND LOAD RESISTANCE,
 ATTACHMENT TO CONCRETE WALL



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BA-1C.3

R2+ BASE ATTACHMENT TO CONCRETE NOTES:

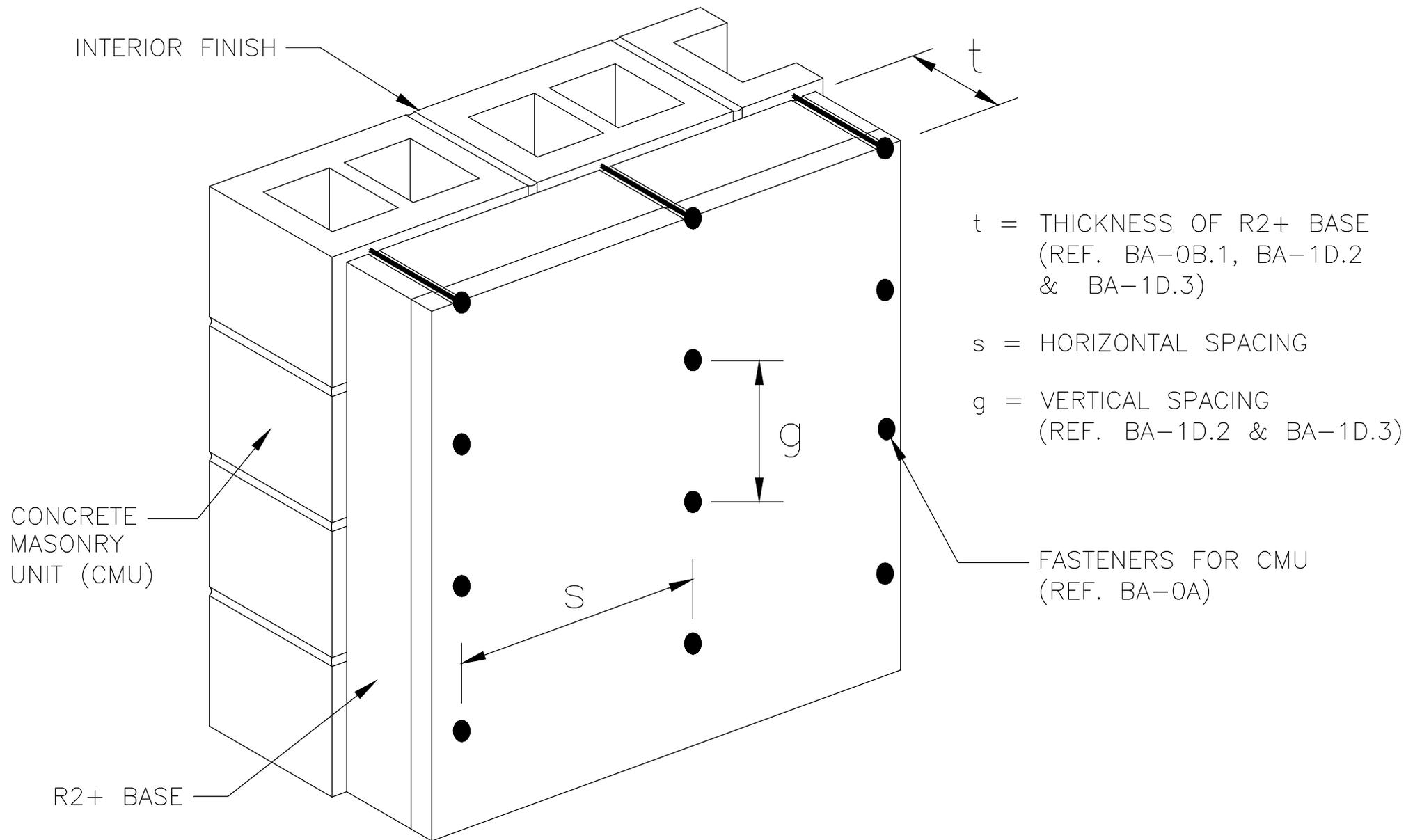
1. MINIMUM 5/8" THICKNESS FIRE TREATED PLYWOOD FACER OF R2+ BASE SHALL BE INSTALLED FACING THE EXTERIOR TO SERVE AS THE FURRING MATERIAL FOR THE NAILS. NAILS SHALL BE DRIVEN WITH HEAD FLUSH TO R2+ BASE WOOD FACER. CONCRETE TO HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 2500 PSI. NAIL SHALL HAVE SUFFICIENT LENGTH AND BE INSTALLED SO THAT IT PENETRATES THE CONCRETE A MINIMUM OF 1.5 INCHES.
2. 2 TABULATED AREAS DO NOT CONSIDER THE FOLLOWING 1) THE CONCRETE STRENGTH IN HOLDING THE FASTENER AS A POST-INSTALLED EMBEDMENT AND 2) SECUREMENT OF THE EXTERIOR CLADDING. THESE ITEMS MUST BE CONSIDERED INDEPENDENTLY FROM THIS REPORT IN ACCORDANCE WITH ACCEPTED PRACTICE. THE MORE RESTRICTIVE FASTENER SPACING BASED ON THIS REPORT AND THESE CONSIDERATIONS SHALL APPLY.
3. THESE NAILS ARE APPROVED FOR INSTALLATION THROUGH R2+ BASE INTO CONCRETE. R2+ BASE SHALL BE INSTALLED WITH PLYWOOD FACING EXTERIOR. NAILS SHALL BE DRIVEN WITH HEAD FLUSH TO PLYWOOD FACE OF R2+ BASE.
4. DETERMINED IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (2005 EDITION). SHEAR STRENGTH DOES NOT CONSIDER CONCRETE STRENGTH IN HOLDING THE FASTENER AS A POST-INSTALLED EMBEDMENT IN ACCORDANCE WITH ACI 318, APPENDIX D.
5. DETERMINED FROM FASTENER HEAD PULL-THROUGH TESTING IN ACCORDANCE WITH ASTM D1037. THE ALLOWABLE PULL-THROUGH FORCE WAS TAKEN AS THE AVERAGE ULTIMATE LOAD DIVIDED BY A FACTOR OF SAFETY OF 5.0 (ALLOWABLE PULL-THROUGH STRENGTH = 105 LBF). ALLOWABLE PRESSURE DOES NOT CONSIDER CONCRETE STRENGTH IN HOLDING THE FASTENER AS A POST-INSTALLED EMBEDMENT IN ACCORDANCE WITH ACI 318, APPENDIX D.
6. THREE-SECOND-GUST WIND SPEED; BASED ON A BUILDING HEIGHT OF 66- FEET, ZONE 5, IMPORTANCE FACTOR, I = 1.0 AND TOPOGRAPHIC FACTOR, K = 1.0, INTERNAL PRESSURE COEFFICIENT, GC = +/- 0.18 IN ACCORDANCE WITH ASCE 7, 2005 EDITION, SECTION 6.4.2.2 (COMPONENT AND CLADDING) ; ASCE 7, 2010 EDITION, SECTION 30.4.2 AND IRC SECTION R301.2.1. PRESSURE EQUALIZATION FACTOR, PEF=1.0.
7. INSULATION ASSEMBLY WEIGHT SHALL INCLUDE ALL MATERIALS SUPPORTED INCLUDING, BUT NOT LIMITED TO, R2+ BASE, WATER-RESISTIVE BARRIER, FLASHINGS, MOUNTING HARDWARE AND EXTERIOR CLADDING.
8. MINIMUM 5/8" THICKNESS FIRE TREATED PLYWOOD FACER OF R2+ BASE SHALL SERVE AS THE MOUNTING SUBSTRATE FOR THE EXTERIOR CLADDING. EXTERIOR CLADDING SYSTEM SHALL BE INSTALLED WITH CODE-COMPLAINT FASTENING AND TECHNIQUE ACCORDING TO CLADDING MANUFACTURER'S AND ARCHITECT'S INSTRUCTIONS.
9. INTERPOLATION BETWEEN TABLE VALUES IS PERMITTED.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.	
08/03/2020	N.T.S.
BA-1C.4	

R2+[®] BASE SYSTEM
R2+ BASE ATTACHMENT TO CONCRETE WALL NOTES



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NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

08/03/2020

N.T.S.

BA-1D.1

R2+[®] BASE SYSTEM

R2+ BASE ATTACHMENT TO
CMU WALL

CARLISLE
COATINGS & WATERPROOFING

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RECOMMENDED FASTENER SPACING FOR SIP LD SCREWS WHEN USED TO SUPPORT THE SHEAR LOAD OF VARIOUS INSULATION THICKNESS AND ASSEMBLY WEIGHTS INTO CONCRETE MASONRY (CMU) SUBSTRATES ^{1,2}

HORIZONTAL FASTENER SPACING, s (IN. O.C.)	INSULATION ASSEMBLY THICKNESS, t (IN.)	SHEAR STRENGTH ⁴ v (LBF/FASTENER)	VERTICAL FASTENER SPACING, g (IN. O.C.)						
			MAXIMUM INSULATION ASSEMBLY WEIGHT TO BE SUPPORTED ^{7,8,9} (PSF)						
			5	7.5	10	15	20	25	30
16	1	52.9	24"	24"	24"	24"	16"	16"	12"
	1.5	38.9	24"	24"	24"	16"	16"	12"	8"
	2	30.6	24"	24"	24"	16"	12"	8"	8"
	3	21.3	24"	24"	16"	12"	8"	6"	6"
	4	16.4	24"	16"	12"	8"	6"	4"	4"
	5	13.2	16"	12"	8"	6"	4"	4"	
24	1	52.9	24"	24"	24"	16"	12"	12"	8"
	1.5	38.9	24"	24"	16"	12"	8"	8"	6"
	2	30.6	24"	24"	16"	12"	8"	6"	6"
	3	21.3	24"	16"	12"	8"	6"	4"	4"
	4	16.4	16"	12"	8"	6"	4"		
	5	13.2	12"	8"	6"	4"			
	6	11.2	12"	8"	6"	4"			

NOTE: REFER TO FASTENING NOTES BA-1A.5
 REF:NTA INC. ENGINEERING EVALUATION REPORT
 FOR TRUFAST, REPORT NO TRU110910-21
 REV-1/29/2020

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

R2+[®] BASE SYSTEM

08/03/2020 | N.T.S.

R2+ BASE FASTENERS
 SPACING, ATTACHMENT TO CMU



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BA-1D.2

ALLOWABLE WIND PRESSURE AND MAXIMUM WIND SPEED FOR SIP LD SCREW INTO CONCRETE MASONRY (CMU) BASED ON FASTENER SPACING AND WIND EXPOSURE ^{1,2,3}

HORIZONTAL FASTENER SPACING, s (IN. O.C.)	VERTICAL FASTENER SPACING, g (IN. O.C.)	ALLOWABLE WIND PRESSURE, ⁵ p (PSF)	MAXIMUM WIND SPEED (MPH) BASED ON WIND EXPOSURE ^{7,8,9}					
			ASCE 7-05 IRC, 2006/2009 IBC			ASCE 7-10 2012 IBC		
			B	C	D	B	C	D
16	24	33.6	105	90	85	130	115	105
	16	50.4	125	110	100	160	140	130
	12	67.2	145	125	120	190	165	150
	8	101	180	155	145	230	200	185
	6	134	210	180	170	265	230	215
	4	202	255	220	205	330	285	265
24	24	22.4	85	70	65	105	90	85
	16	33.6	105	90	85	130	115	105
	12	44.8	120	105	95	150	130	125
	8	67.2	145	125	120	190	165	150
	6	89.6	170	145	135	215	190	175
	4	134	210	180	170	265	230	215

NOTE: REFER TO FASTENING NOTES BA-1A.5
 REF:NTA INC. ENGINEERING EVALUATION REPORT
 FOR TRUFAST, REPORT NO TRU110910-21
 REV-1/29/2020

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

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BA-1D.3

R2+® BASE SYSTEM

R2+ BASE WIND LOAD RESISTANCE, ATTACHMENT TO CMU



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R2+ BASE ATTACHMENT TO CMU NOTES:

1. MINIMUM 5/8" THICKNESS FIRE TREATED PLYWOOD FACER OF R2+ BASE SHALL BE INSTALLED FACING THE EXTERIOR TO SERVE AS THE FURRING MATERIAL FOR THE SCREWS. SCREWS SHALL BE DRIVEN WITH HEAD FLUSH TO R2+ BASE WOOD FACER. MASONRY TO HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 2500 PSI. SCREW SHALL HAVE SUFFICIENT LENGTH AND BE INSTALLED SO THAT IT PENETRATES THE MASONRY A MINIMUM OF 1.5 INCHES.
2. TABULATED AREAS DO NOT CONSIDER THE FOLLOWING: 1) THE MASONRY STRENGTH IN HOLDING THE FASTENER AS A POST-INSTALLED EMBEDMENT; 2) SECUREMENT OF THE EXTERIOR CLADDING. THESE ITEMS MUST BE CONSIDERED INDEPENDENTLY FROM THIS REPORT IN ACCORDANCE WITH ACCEPTED PRACTICE. THE MORE RESTRICTIVE FASTENER SPACING BASED ON THIS REPORT AND THESE CONSIDERATIONS SHALL APPLY.
3. THESE SCREWS ARE APPROVED FOR INSTALLATION THROUGH R2+ BASE, PLYWOOD FACING EXTERIOR. SCREWS SHALL BE DRIVEN WITH HEAD FLUSH TO PLYWOOD FACE OF R2+ BASE..
4. DETERMINED IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (2005 EDITION). SHEAR STRENGTH DOES NOT CONSIDER MASONRY STRENGTH IN HOLDING THE FASTENER AS A POST-INSTALLED EMBEDMENT IN ACCORDANCE WITH ACI 318, APPENDIX D.
5. DETERMINED FROM FASTENER HEAD PULL-THROUGH TESTING IN ACCORDANCE WITH ASTM D1037. THE ALLOWABLE PULL-THROUGH FORCE WAS TAKEN AS THE AVERAGE ULTIMATE LOAD DIVIDED BY A FACTOR OF SAFETY OF 5.0 (ALLOWABLE PULL-THROUGH STRENGTH = 112 LBF). ALLOWABLE PRESSURE DOES NOT CONSIDER MASONRY STRENGTH IN HOLDING THE FASTENER AS A POST-INSTALLED EMBEDMENT IN ACCORDANCE WITH ACI 318, APPENDIX D.
6. THREE-SECOND-GUST WIND SPEED; BASED ON A BUILDING HEIGHT OF 66- FEET, ZONE 5, IMPORTANCE FACTOR, I =1.0 AND TOPOGRAPHIC FACTOR, K =1.0, INTERNAL PRESSURE COEFFICIENT, GC =+/-0.18 IN ACCORDANCE WITH ASCE 7, 2005 EDITION, SECTION 6.4.2.2 (COMPONENT AND CLADDING) ; ASCE 7, 2010 EDITION, SECTION 30.4.2 AND IRC SECTION R301.2.1. PRESSURE EQUALIZATION FACTOR, PEF=1.0.
7. INSULATION ASSEMBLY WEIGHT SHALL INCLUDE ALL MATERIALS SUPPORTED INCLUDING, BUT NOT LIMITED TO, R2+ BASE, WATER-RESISTIVE BARRIER, FLASHINGS, MOUNTING HARDWARE AND EXTERIOR CLADDING.
8. MINIMUM 5/8" THICKNESS FIRE TREATED PLYWOOD FACER OF R2+ BASE SHALL SERVE AS THE MOUNTING SUBSTRATE FOR THE EXTERIOR CLADDING. EXTERIOR CLADDING SYSTEM SHALL BE INSTALLED WITH CODE-COMPLAINT FASTENING AND TECHNIQUE ACCORDING TO CLADDING MANUFACTURER'S AND ARCHITECT'S INSTRUCTIONS.
9. INTERPOLATION BETWEEN TABLE VALUES IS PERMITTED.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

R2+® BASE SYSTEM

08/03/2020 | N.T.S.

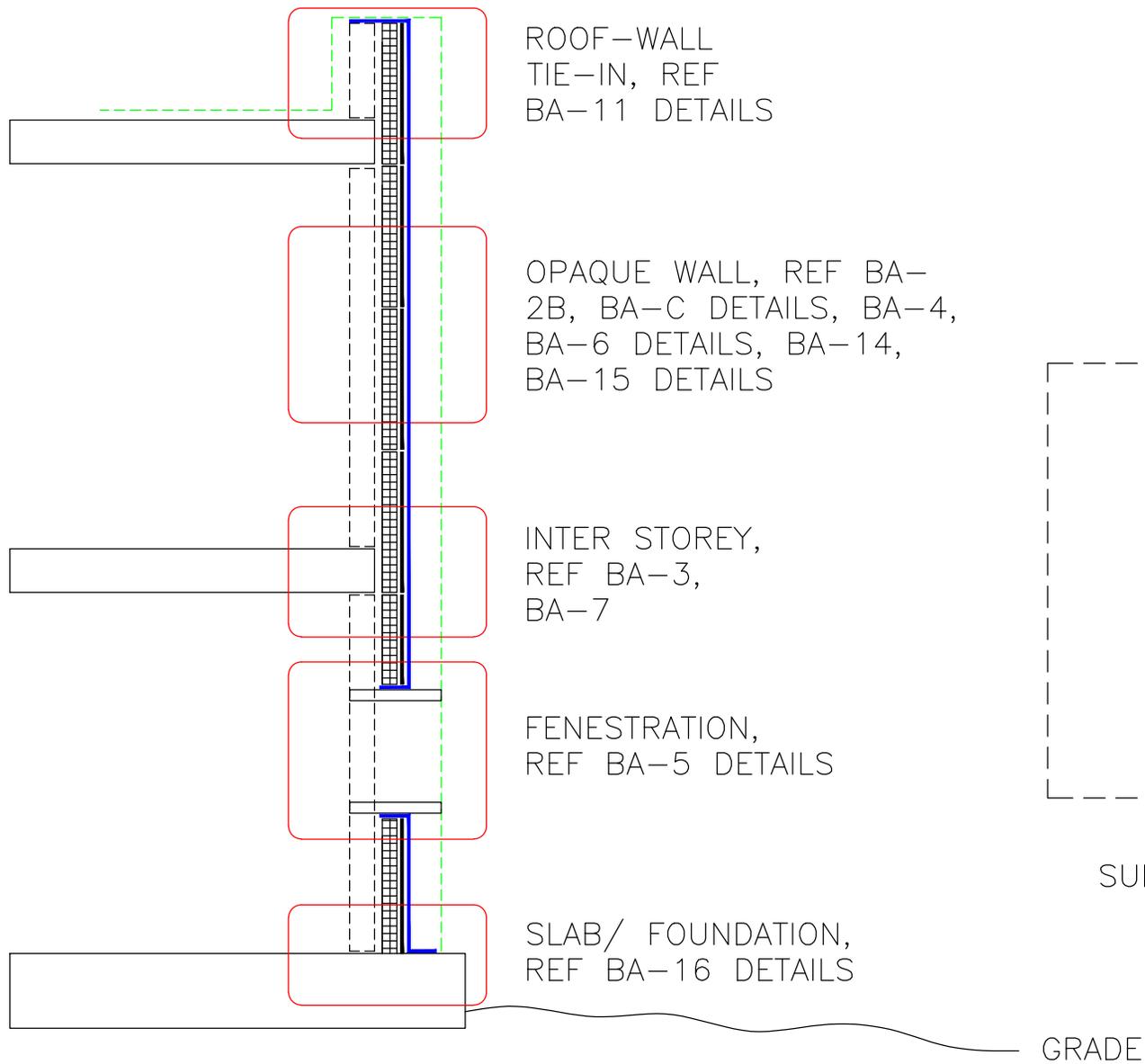
R2+ BASE ATTACHMENT

BA-1D.4

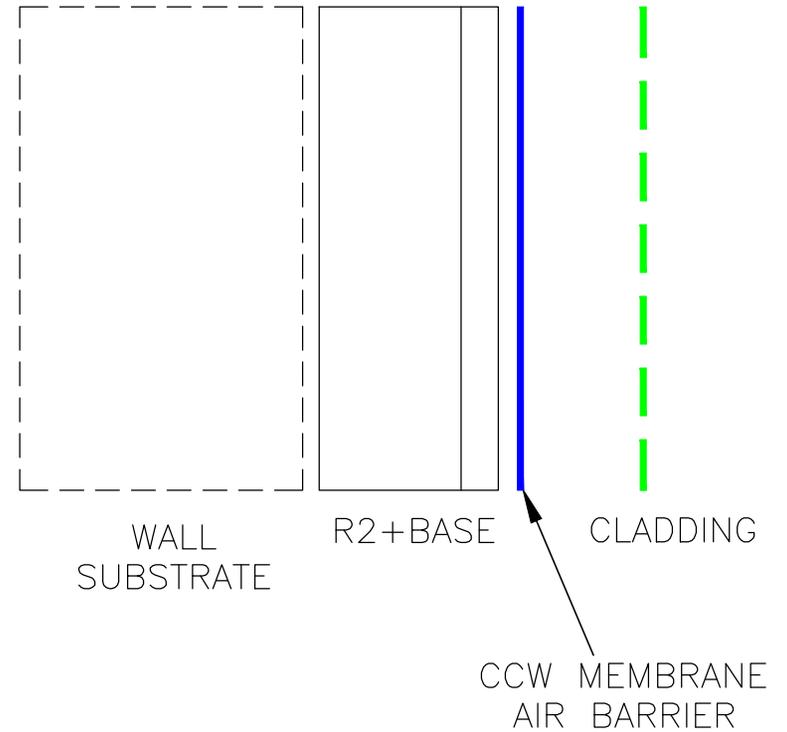
TO CMU NOTES



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ENLARGED VIEW



NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

R2+® BASE SYSTEM

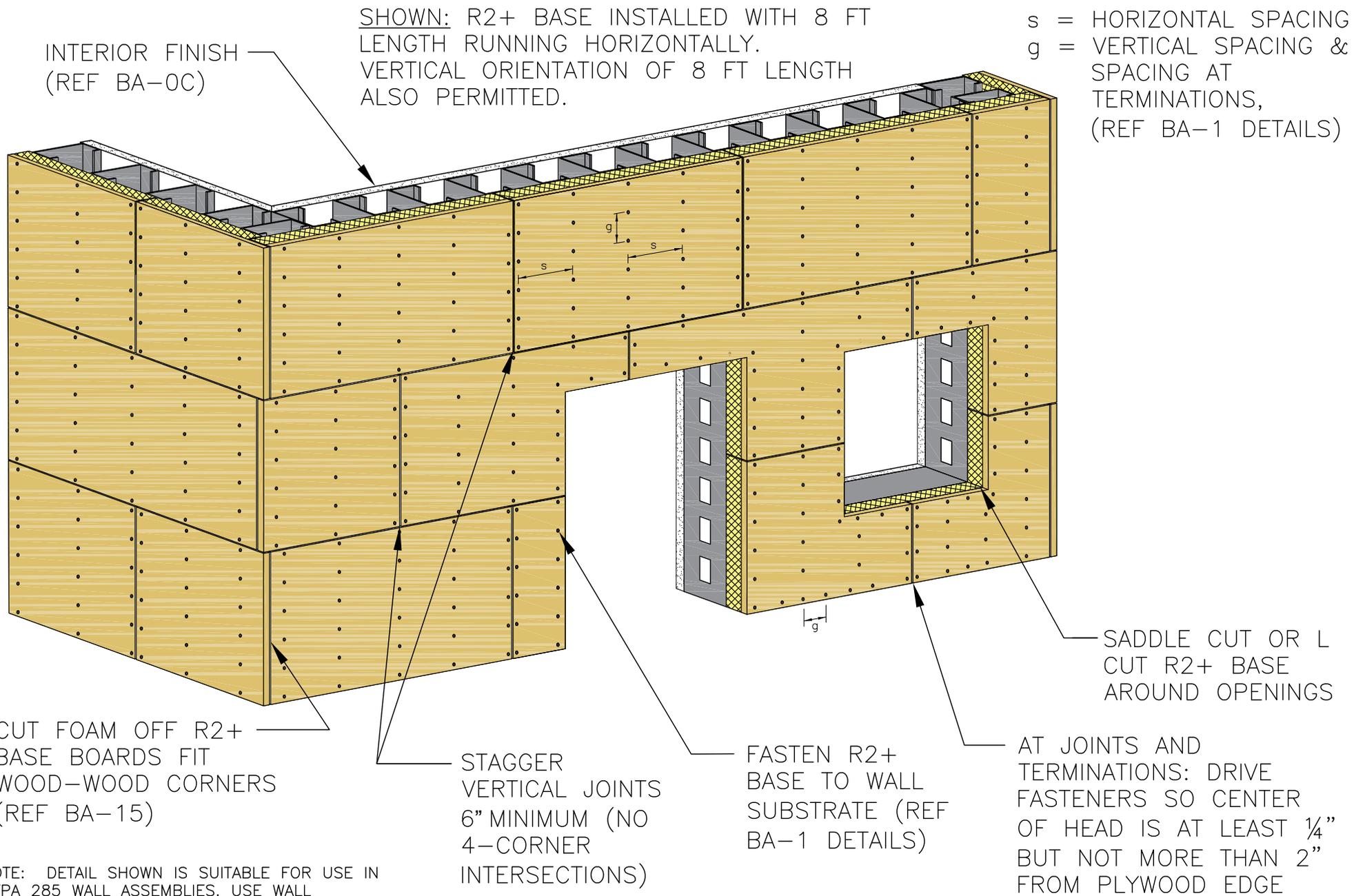
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BA-2A

R2+ BASE BUILDING SECTION



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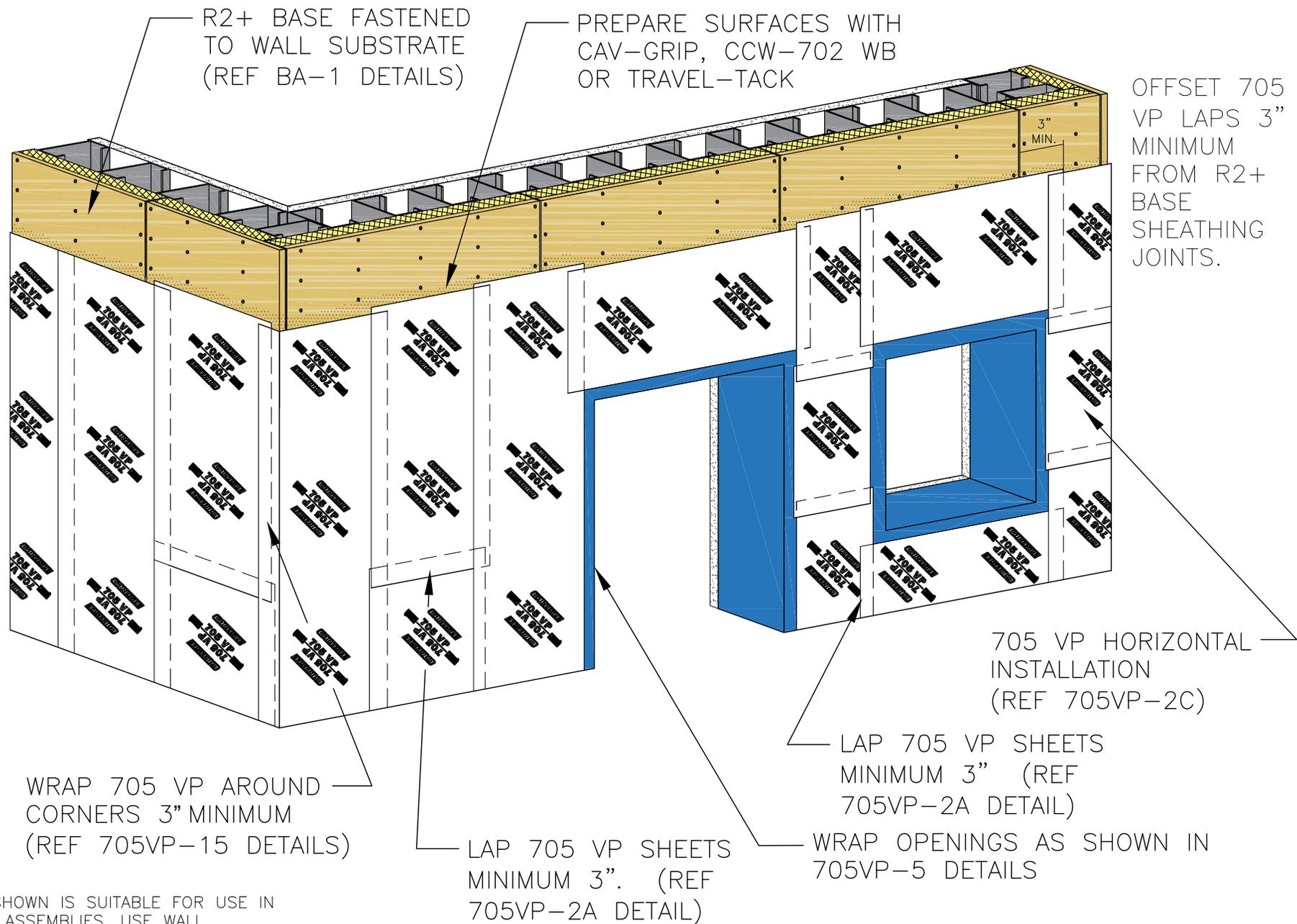
BA-2B

R2+® BASE SYSTEM

R2+ BASE INSTALLATION PATTERN



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NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

08/03/2020

N.T.S.

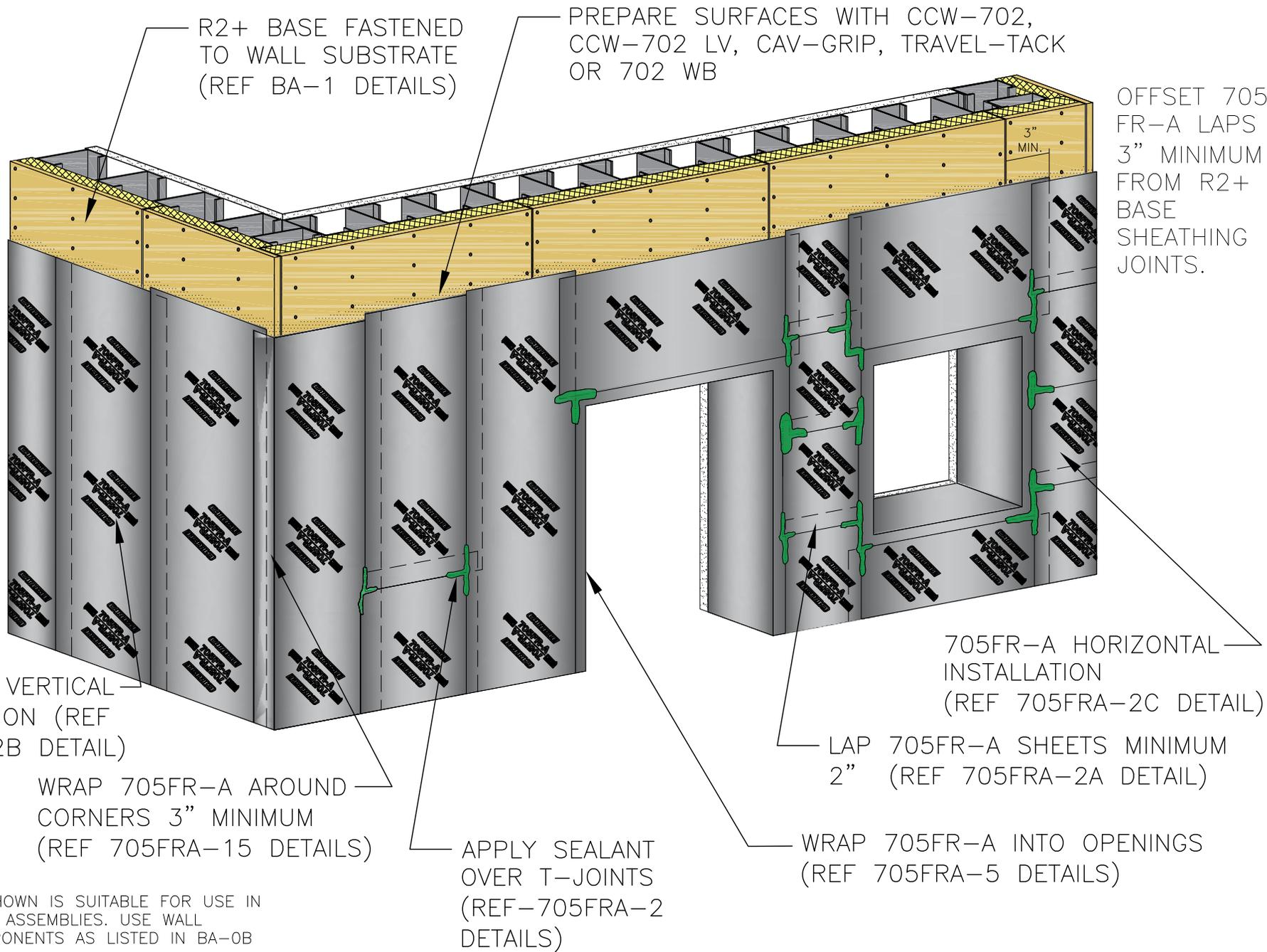
BA-2C.1

R2+® BASE SYSTEM

FIRE RESIST 705 VP OVER R2+ BASE



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DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

R2+® BASE SYSTEM

FIRE RESIST 705FR-A OVER R2+ BASE



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08/03/2020

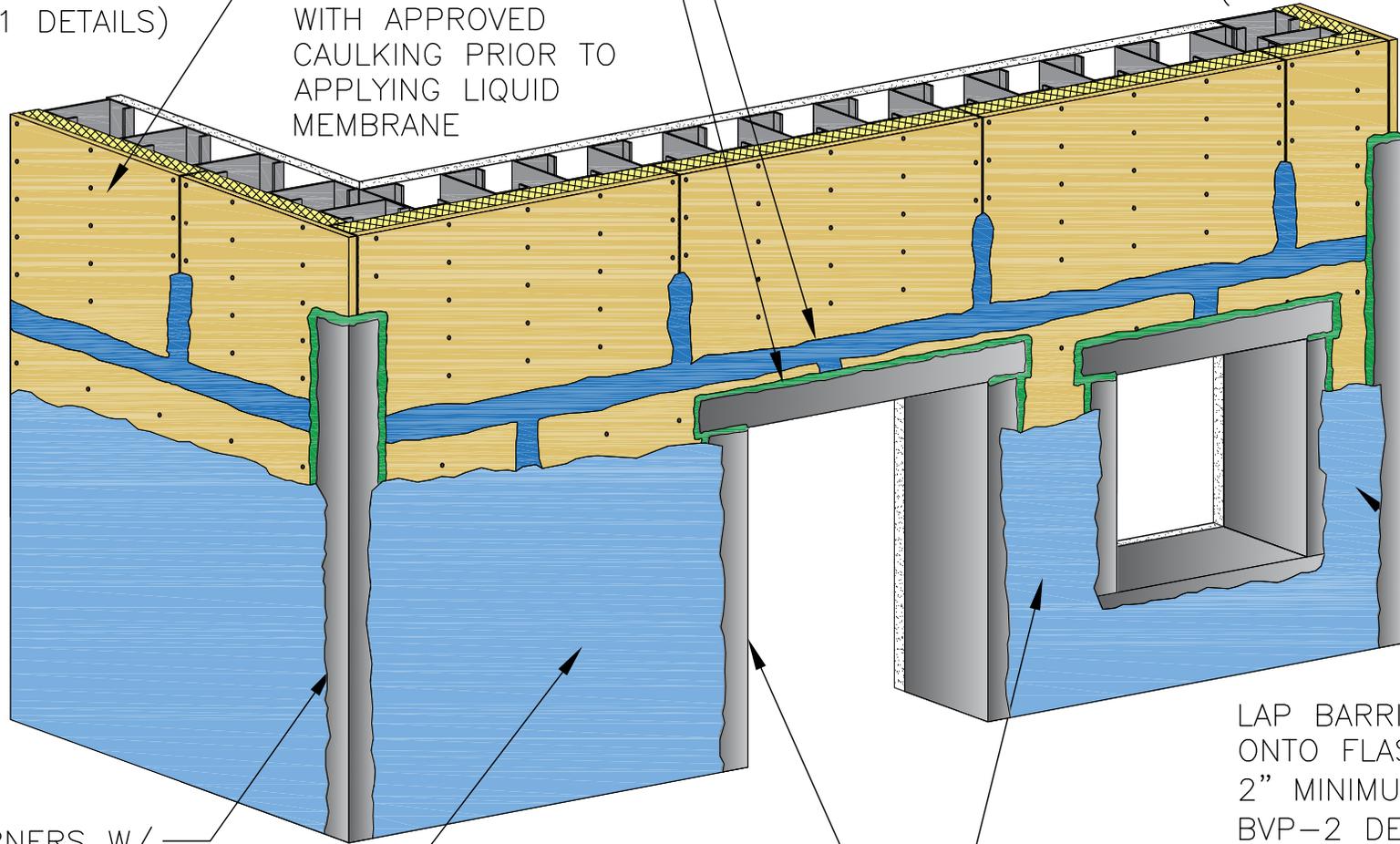
N.T.S.

BA-2C.2

R2+ BASE FASTENED TO WALL SUBSTRATE (REF BA-1 DETAILS)

SEAL ALL EDGES OF SHEET MEMBRANES WITH APPROVED CAULKING PRIOR TO APPLYING LIQUID MEMBRANE

PREPARE SHEATHING JOINTS WITH APPROVED CAULKING OR 4" DCH REINFORCING FABRIC EMBEDDED IN BARRITECH VP (REF BVP-4 DETAILS)



WRAP CORNERS W/ 705 FR-A OR DCH REINFORCING FABRIC IMBEDDED IN BARRITECH VP (REF BVP-15 DETAILS)

BARRITECH VP 60 WET MILS, 1 COAT BY SPRAY OR 2-COATS BY ROLLER INSTALLATION (REF BVP-1 DETAILS)

LAP BARRITECH VP ONTO FLASHING EDGES 2" MINIMUM (REF BVP-2 DETAILS)

EXTRA BARRITECH VP DETAIL COATING WITH BRUSH MAY BE REQUIRED TO COVER FASTENER HEADS AND KNOTS ON R2+ BASE PLYWOOD SURFACE

WRAP OPENINGS W/ 705 FR-A OR LIQUIFIBER IMBEDDED IN BARRITECH VP (REF BVP-5 DETAILS)

NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

R2+ BASE SYSTEM

FIRE RESIST BARRITECH VP OVER R2+ BASE



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N.T.S.

BA-2C.3

R2+ BASE FASTENED TO WALL SUBSTRATE (REF BA-1 DETAILS)

SEAL ALL EDGES OF SHEET MEMBRANES WITH APPROVED CAULKING PRIOR TO APPLYING LIQUID MEMBRANE

PREPARE SHEATHING JOINTS WITH APPROVED CAULKING OR 4" DCH REINFORCING FABRIC EMBEDDED IN BARRITHANE VP (REF BTH-4 DETAILS)

WRAP CORNERS W/ 705 FR-A OR DCH REINFORCING FABRIC IMBEDDED IN BARRITHANE VP (REF BTH-15 DETAILS)

BARRITHANE VP 15-20 WET MILS, 1 COAT BY ROLLER INSTALLATION (REF BTH-1 DETAILS)

LAP BARRITHANE VP ONTO FLASHING EDGES 2" MINIMUM (REF BTH-2 DETAILS)

EXTRA BARRITHANE VP DETAIL COATING WITH BRUSH MAY BE REQUIRED TO COVER FASTENER HEADS AND KNOTS ON R2+ BASE PLYWOOD SURFACE

WRAP OPENINGS W/ 705 FR-A (REF BTH-5 DETAILS)

NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

BA-2C.4

FIRE RESIST BARRITHANE VP OVER R2+ BASE

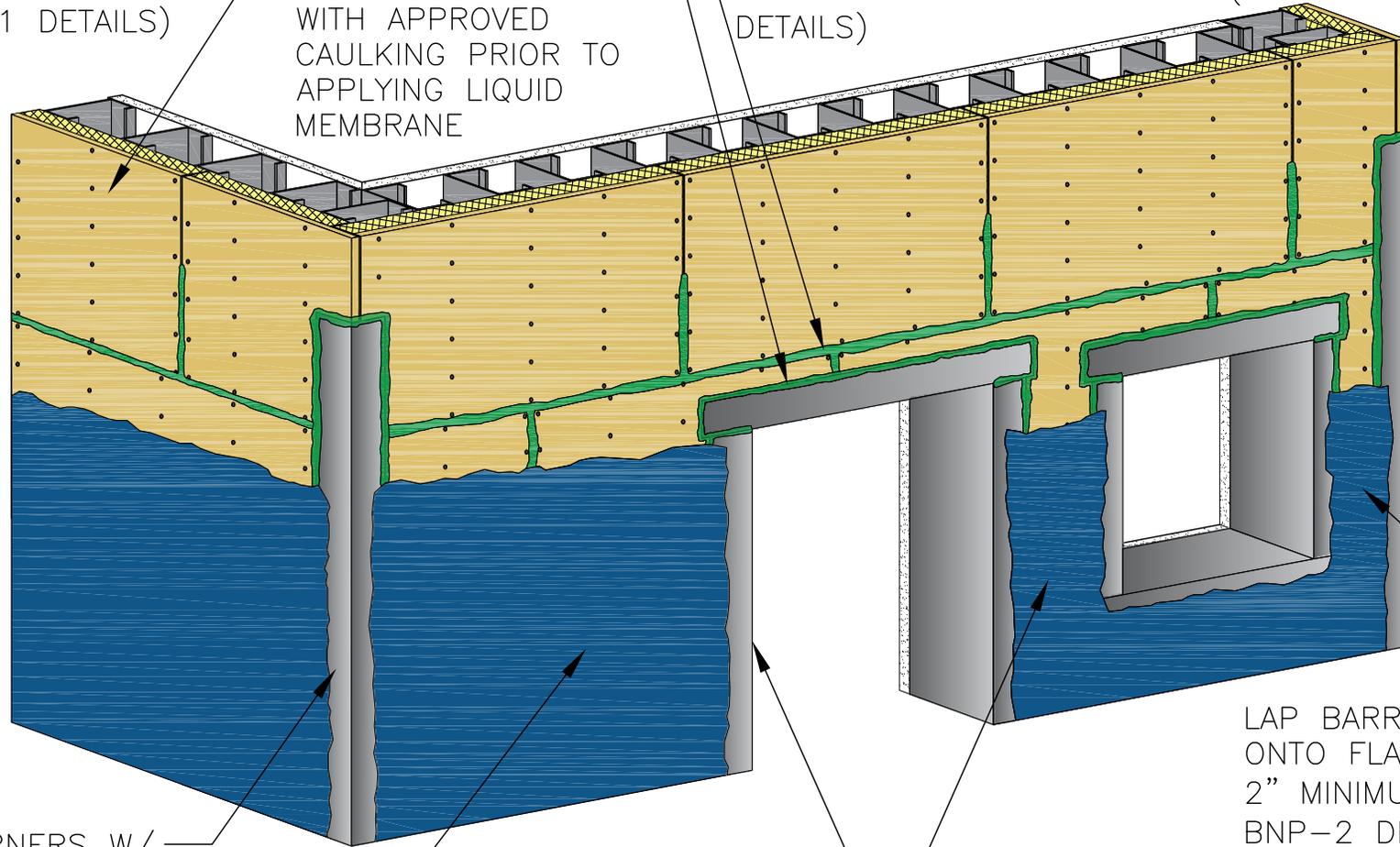


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R2+ BASE FASTENED TO WALL SUBSTRATE (REF BA-1 DETAILS)

SEAL ALL EDGES OF SHEET MEMBRANES WITH APPROVED CAULKING PRIOR TO APPLYING LIQUID MEMBRANE

PREPARE SHEATHING JOINTS WITH APPROVED CAULKING OR 4" DCH REINFORCING FABRIC EMBEDDED IN BARRITECH NP (REF BNP-4 DETAILS)



WRAP CORNERS W/ 705 FR-A OR DCH REINFORCING FABRIC IMBEDDED IN BARRITECH NP (REF BNP-15 DETAILS)

BARRITECH NP 70 WET MILS, 1 COAT BY SPRAY OR 3-COATS BY ROLLER INSTALLATION (REF BNP-1 DETAILS)

LAP BARRITECH NP ONTO FLASHING EDGES 2" MINIMUM (REF BNP-2 DETAILS)

EXTRA BARRITECH NP DETAIL COATING WITH BRUSH MAY BE REQUIRED TO COVER FASTENER HEADS AND KNOTS ON R2+ BASE PLYWOOD SURFACE

WRAP OPENINGS W/ 705 FR-A OR LIQUIFIBER IMBEDDED IN BARRITECH NP (REF BNP-5 DETAILS)

NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

08/03/2020

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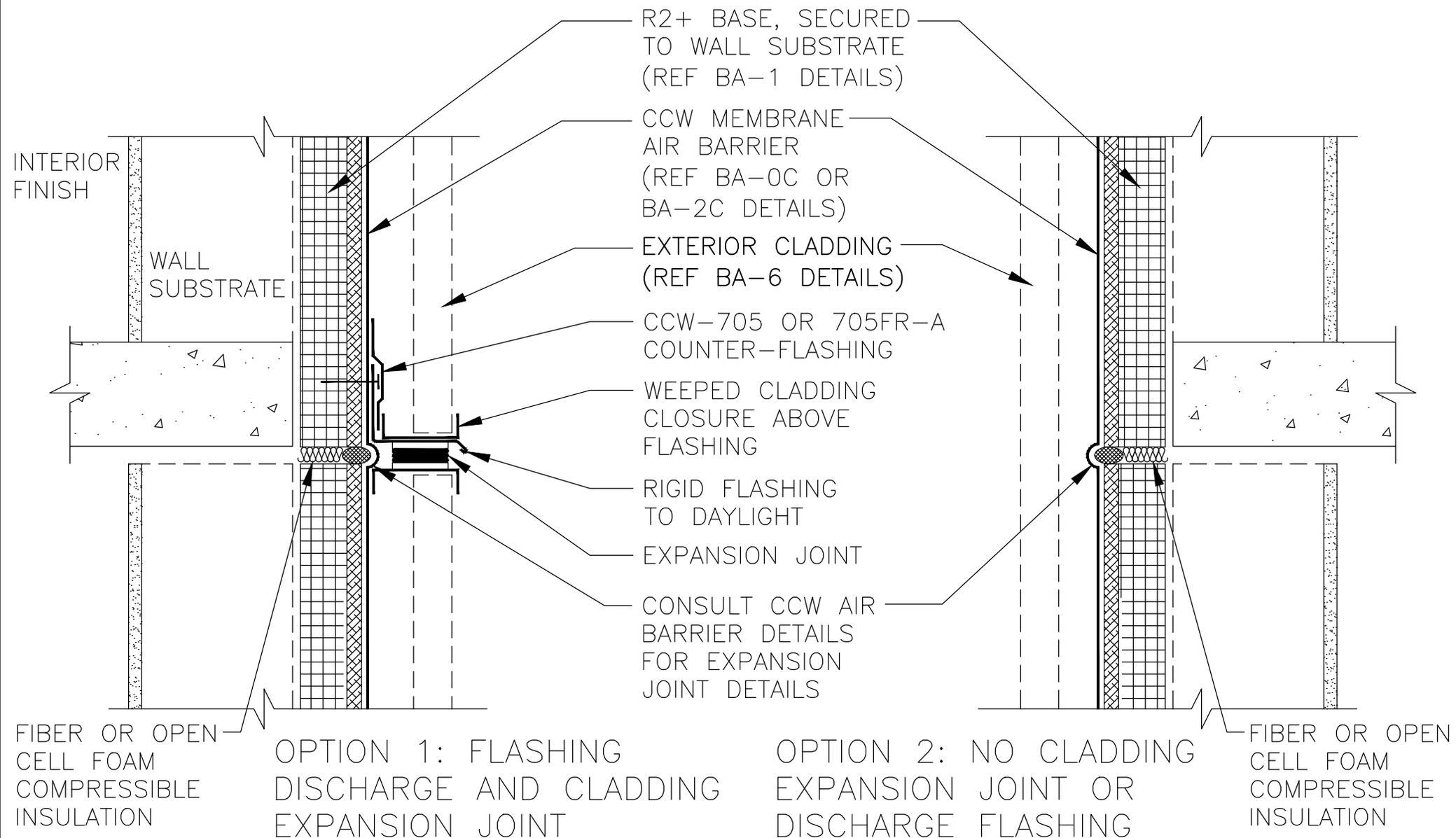
BA-2C.5

R2+® BASE SYSTEM

FIRE RESIST BARRITECH NP/NPLT OVER R2+ BASE



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NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

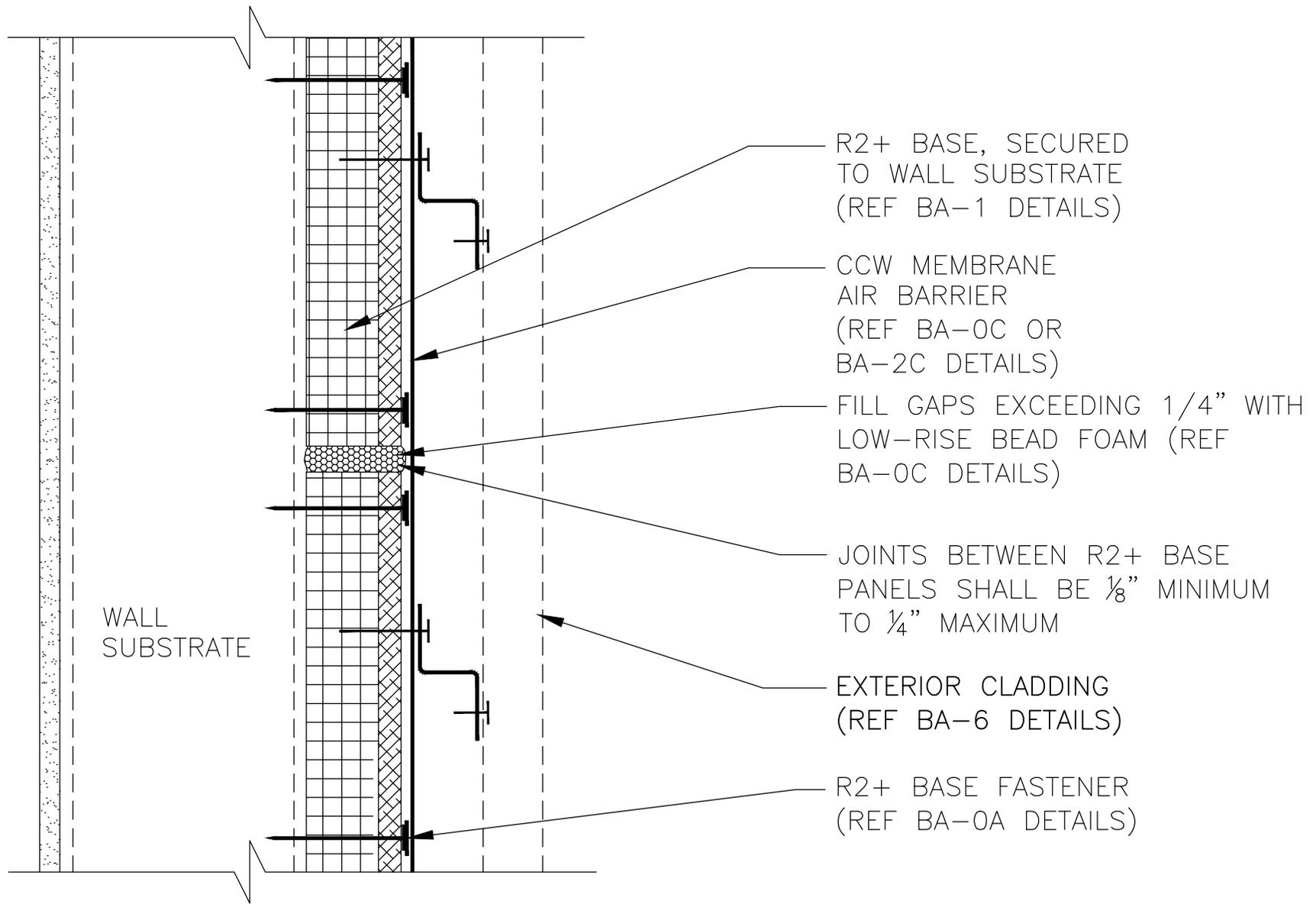
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BA-3

R2+® BASE SYSTEM
 R2+ BASE FLOORLINE
 EXPANSION JOINT



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NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

08/03/2020

N.T.S.

BA-4

R2+[®] BASE SYSTEM

R2+ BASE JOINTS BETWEEN PANELS

CARLISLE
COATINGS & WATERPROOFING

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NOTES:

1. FASTEN AND SHIM WINDOW ACCORDING TO WINDOW MANUFACTURERS INSTRUCTIONS

PROVIDE CONTINUOUS SEAL OF WINDOW TO CARLISLE AVB WITH APPROVED SEALANT

INTERIOR FINISH

FIRE-TREATED LUMBER BUCK (OPTIONAL) TO PROVIDE SECURE BASE FOR WINDOW ATTACHMENT

STEEL OR FIRE TREATED WOOD STUDS

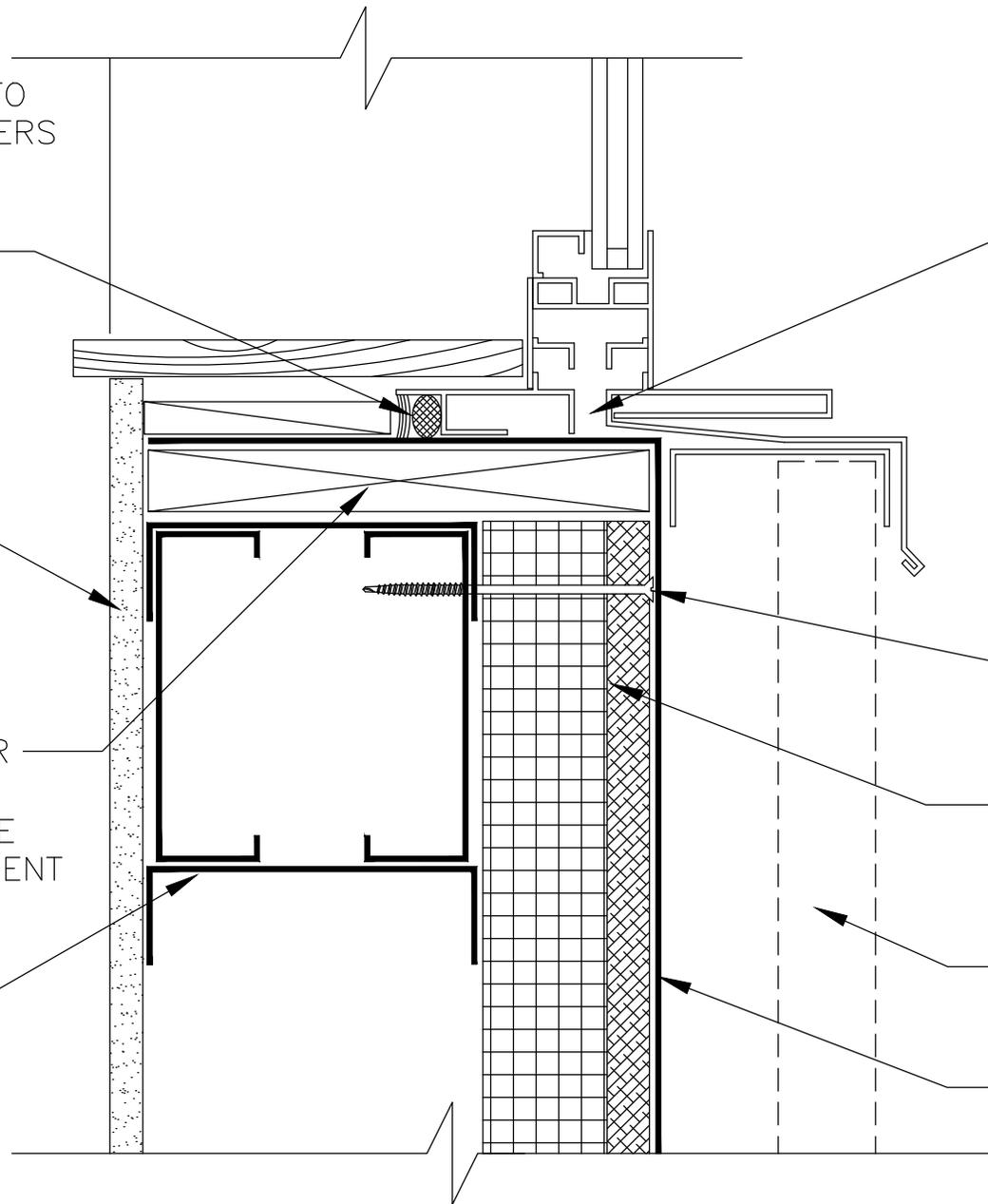
ALIGN WINDOW THERMAL BREAK WITH WALL INSULATION

MECHANICAL ATTACHMENT (REF BA-0A)

R2+ BASE SECURED TO WALL (REF BA-1 DETAILS)

EXTERIOR CLADDING (REF BA-6 DETAILS)

CCW MEMBRANE AIR BARRIER (REF BA-0C, BA-2C DETAILS)



NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

08/03/2020 | N.T.S.

BA-5A.1

R2+® BASE SYSTEM

R2+ BASE

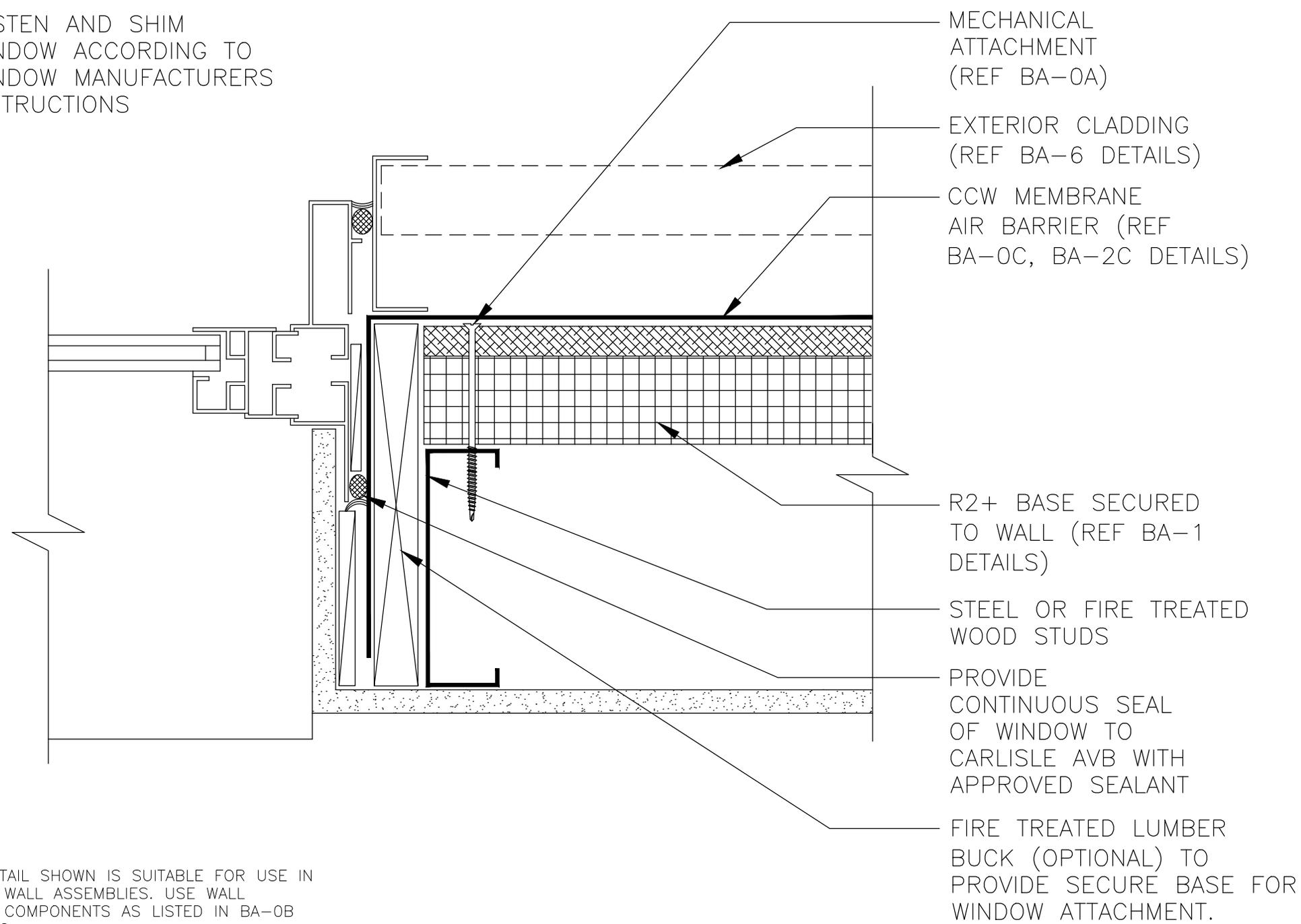
PUNCHED WINDOW - SILL



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NOTES:

1. FASTEN AND SHIM WINDOW ACCORDING TO WINDOW MANUFACTURERS INSTRUCTIONS



- MECHANICAL ATTACHMENT (REF BA-0A)
- EXTERIOR CLADDING (REF BA-6 DETAILS)
- CCW MEMBRANE AIR BARRIER (REF BA-0C, BA-2C DETAILS)
- R2+ BASE SECURED TO WALL (REF BA-1 DETAILS)
- STEEL OR FIRE TREATED WOOD STUDS
- PROVIDE CONTINUOUS SEAL OF WINDOW TO CARLISLE AVB WITH APPROVED SEALANT
- FIRE TREATED LUMBER BUCK (OPTIONAL) TO PROVIDE SECURE BASE FOR WINDOW ATTACHMENT.

NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

08/03/2020 | N.T.S.

BA-5A.2

R2+® BASE SYSTEM

R2+ BASE

PUNCHED WINDOW - JAMB



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NOTES:

1. FASTEN AND SHIM WINDOW ACCORDING TO WINDOW MANUFACTURERS INSTRUCTIONS

INTERIOR FINISH

STEEL OR FIRE TREATED WOOD STUDS

FIRE TREATED LUMBER BUCK (OPTIONAL) TO PROVIDE SECURE BASE FOR WINDOW ATTACHMENT.

PROVIDE CONTINUOUS SEAL OF WINDOW TO CARLISLE AVB WITH APPROVED SEALANT

R2+ BASE SECURED TO WALL SUBSTRATE (REF BA-1 DETAILS)

EXTERIOR CLADDING (REF BA-6 DETAILS)

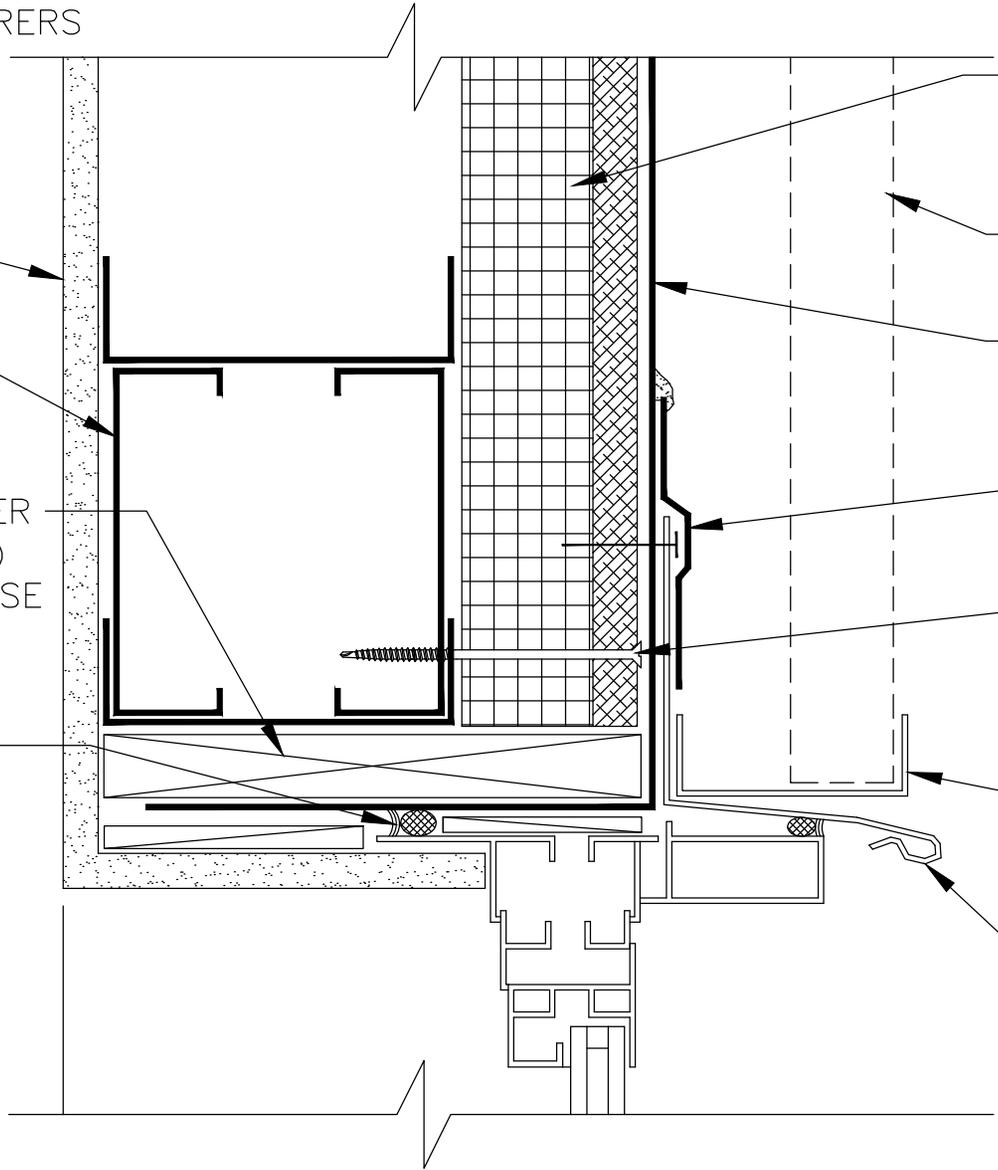
CCW MEMBRANE AIR BARRIER (REF BA-0C, BA-2C DETAILS)

CCW-705 OR 705FR-A COUNTERFLASHING STRIP

MECHANICAL ATTACHMENT (REF BA-0A)

WEEPED CLADDING CLOSURE AT WINDOW HEAD

RIGID FLASHING DRIP EDGE



NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

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BA-5A.3

R2+® BASE SYSTEM

R2+ BASE

PUNCHED WINDOW - HEAD



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NOTES:

1. FASTEN AND SHIM WINDOW ACCORDING TO WINDOW MANUFACTURERS INSTRUCTIONS

PROVIDE CONTINUOUS SEAL OF WINDOW TO CARLISLE AVB WITH APPROVED SEALANT

INTERIOR FINISH

STEEL OR FIRE TREATED WOOD STUDS

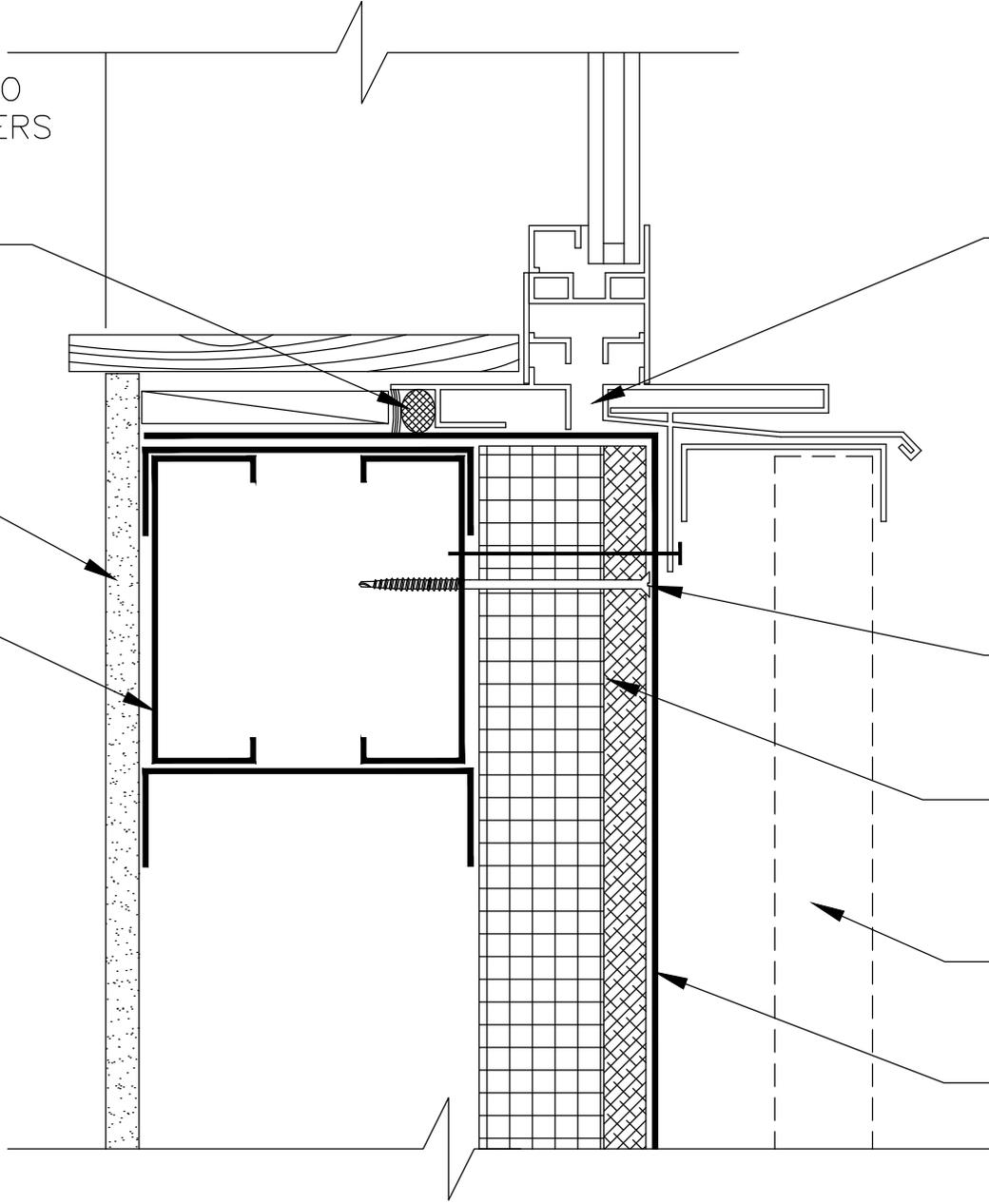
ALIGN WINDOW THERMAL BREAK WITH WALL INSULATION

MECHANICAL ATTACHMENT (REF BA-0A)

R2+ BASE SECURED TO WALL (REF BA-1 DETAILS)

EXTERIOR CLADDING (REF BA-6 DETAILS)

CCW MEMBRANE AIR BARRIER (REF BA-0C, BA-2C DETAILS)



NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

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08/03/2020 | N.T.S.

BA-5B.1

R2+® BASE SYSTEM

R2+ BASE

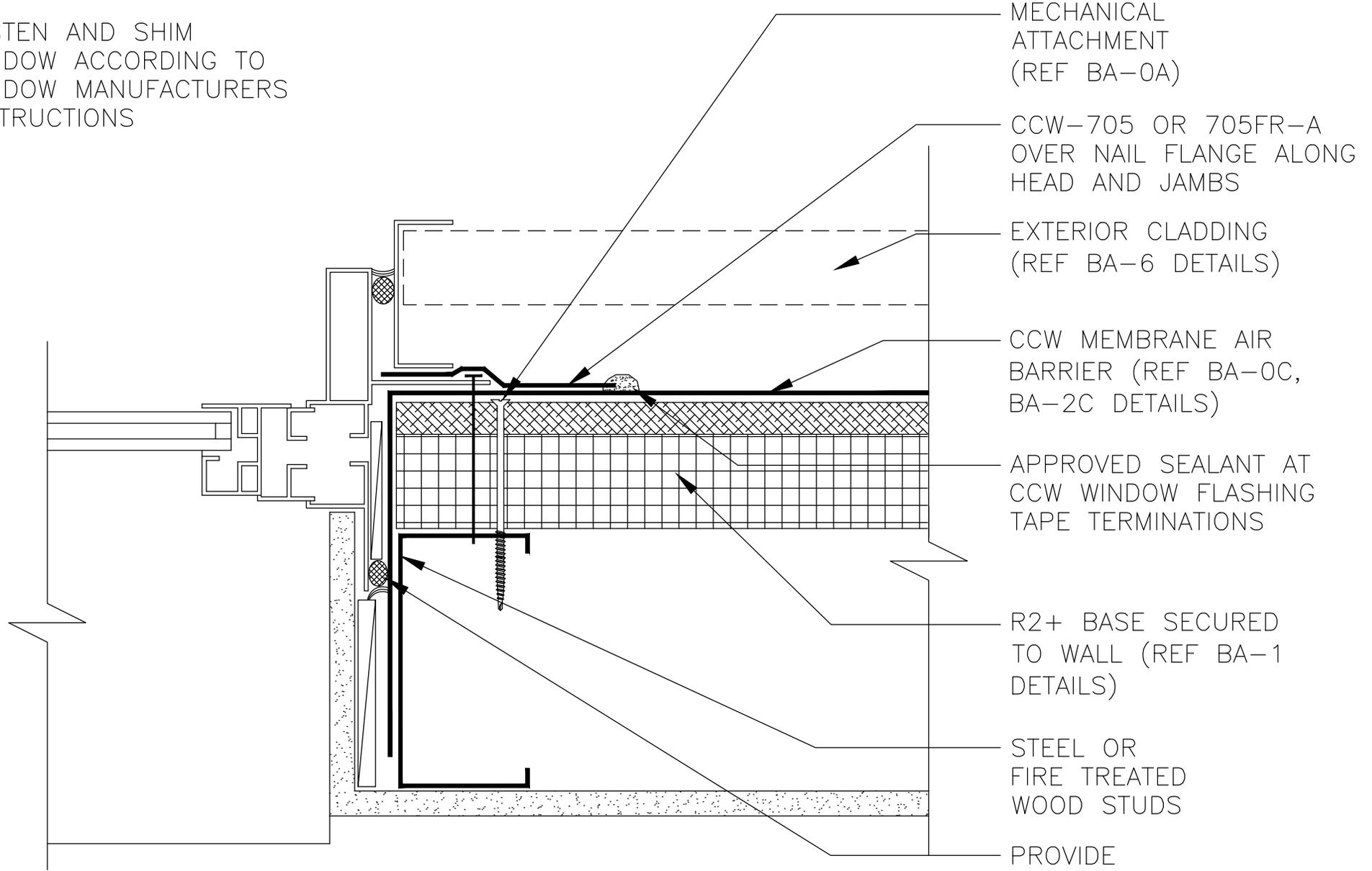
NAIL FLANGE WINDOW



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NOTES:

1. FASTEN AND SHIM WINDOW ACCORDING TO WINDOW MANUFACTURERS INSTRUCTIONS



NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

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BA-5B.2

R2+® BASE SYSTEM

R2+ BASE
NAIL FLANGE WINDOW



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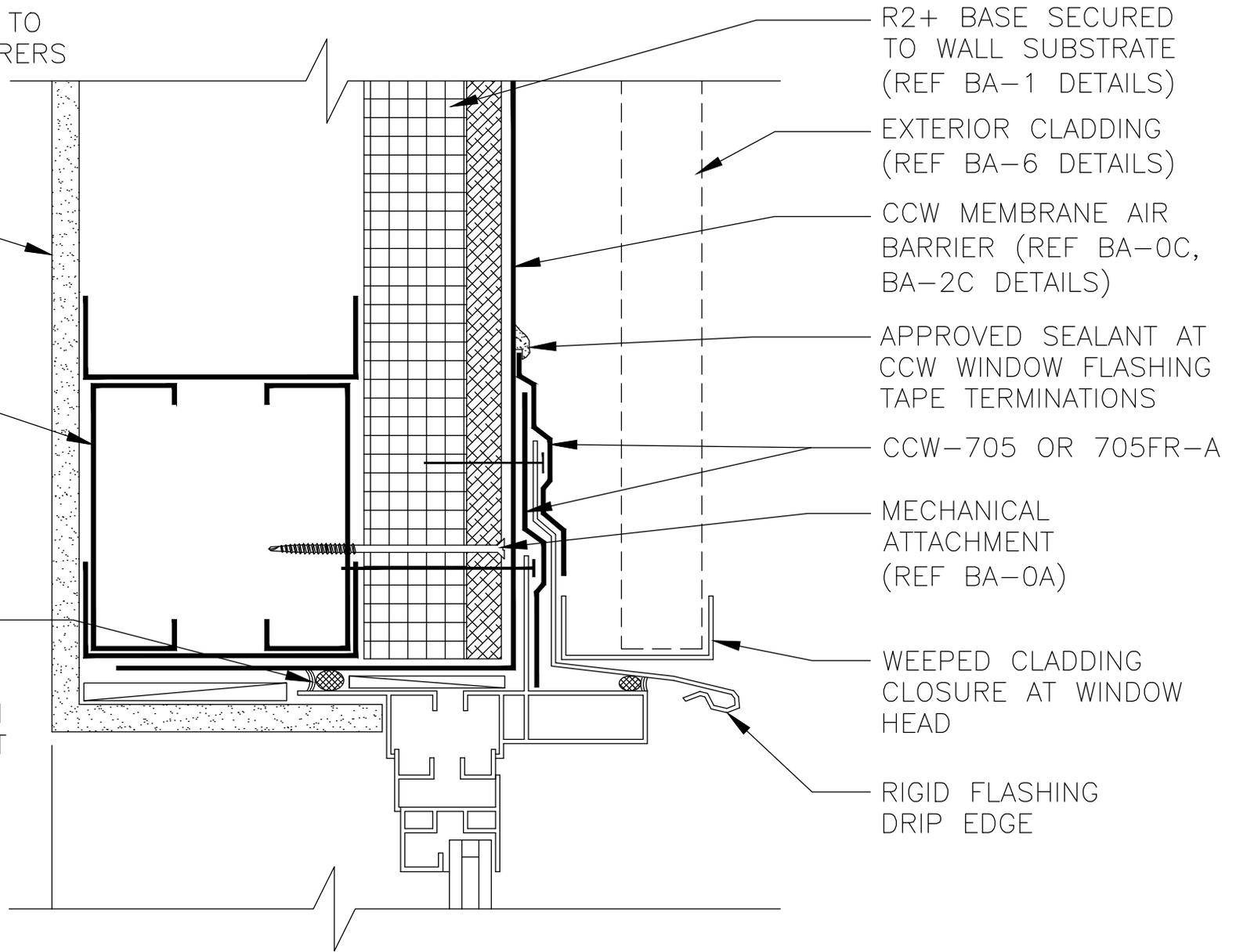
NOTES:

1. FASTEN AND SHIM WINDOW ACCORDING TO WINDOW MANUFACTURERS INSTRUCTIONS

INTERIOR FINISH

STEEL OR FIRE TREATED WOOD STUDS

PROVIDE CONTINUOUS SEAL OF WINDOW TO CARLISLE AVB WITH APPROVED SEALANT



R2+ BASE SECURED TO WALL SUBSTRATE (REF BA-1 DETAILS)

EXTERIOR CLADDING (REF BA-6 DETAILS)

CCW MEMBRANE AIR BARRIER (REF BA-0C, BA-2C DETAILS)

APPROVED SEALANT AT CCW WINDOW FLASHING TAPE TERMINATIONS

CCW-705 OR 705FR-A

MECHANICAL ATTACHMENT (REF BA-0A)

WEEPED CLADDING CLOSURE AT WINDOW HEAD

RIGID FLASHING DRIP EDGE

NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

08/03/2020

N.T.S.

R2+® BASE SYSTEM

R2+ BASE

NAIL FLANGE WINDOW

BA-5B.3



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APPROVED BEAD
FOAM IN JOINTS
EXCEEDING 1/8" (REF
BA-0B, 0C)

APPROVED FASTENERS AND
SPACING (INTO STUDS, MASONRY
OR CONCRETE) REF BA-1 DETAILS

CCW MEMBRANE AIR
BARRIER (REF BA-0C
OR BA-2C DETAILS)

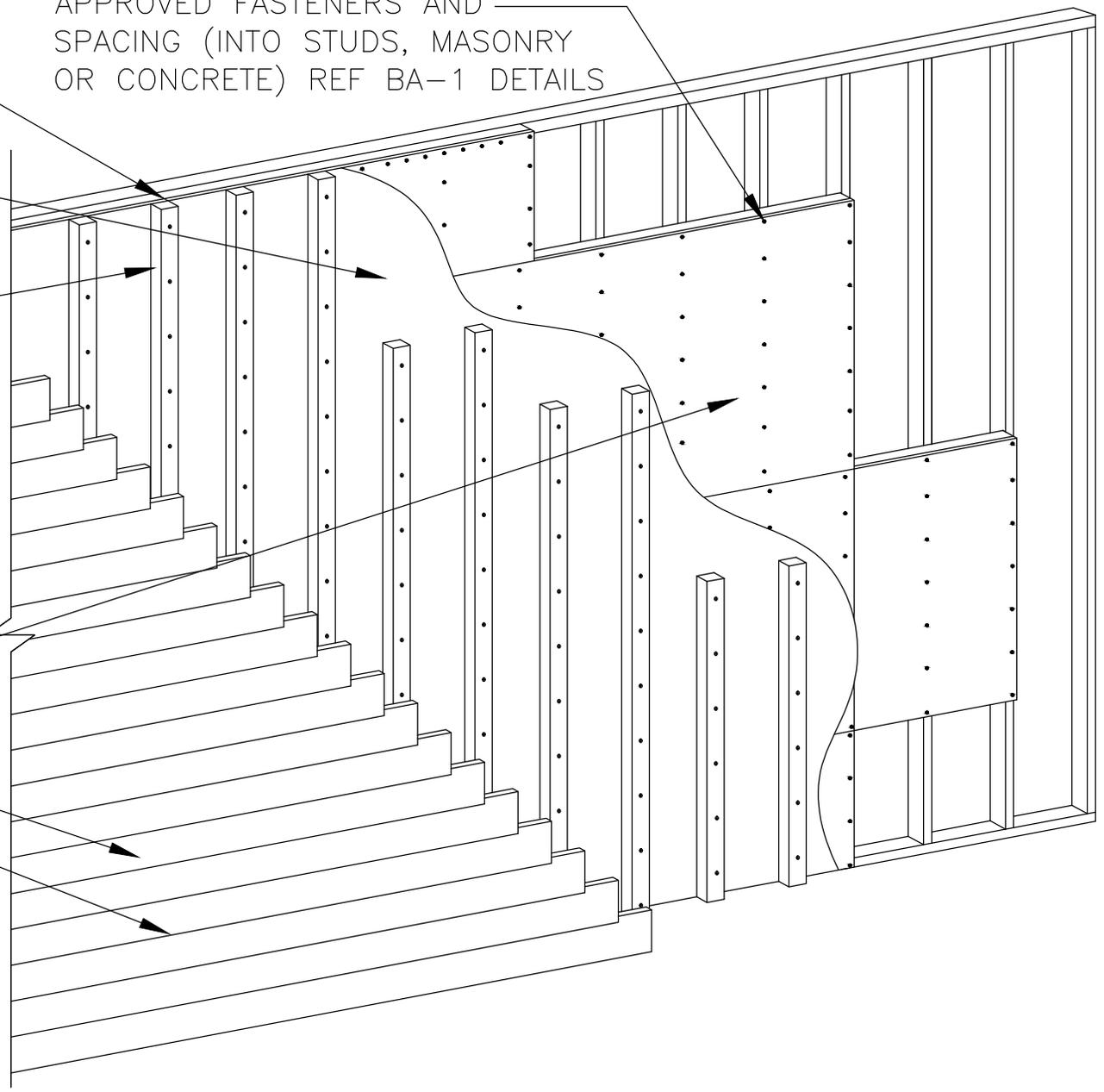
FURRING STRIPS TO
SPACE SIDING FROM
MEMBRANE SURFACE

PROVIDE MINIMUM 1/4"
SPACE BETWEEN SIDING
AND CCW MEMBRANE TO
PROMOTE DRAINAGE AND
DRYING

R2+ BASE (PLYWOOD
FACING EXTERIOR)

FIBER CEMENT SIDING
(REF BA-0C DETAILS)

FASTEN FIBER CEMENT SIDING
THROUGH FURRING INTO
PLYWOODFACE OF R2+ BASE
USING CODE APPROVED
FASTENERS AND SPACING



NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN
NFPA 285 WALL ASSEMBLIES. USE WALL
ASSEMBLY COMPONENTS AS LISTED IN BA-0B
AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR
R2+ INSULATION INSTALLATION ONLY.

08/03/2020 | N.T.S.

BA-6A

R2+® BASE SYSTEM

FIBER CEMENT SIDING ATTACHMENT TO R2+ BASE



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APPROVED BEAD
FOAM IN JOINTS
EXCEEDING 1/8" (REF
BA-0B, 0C)

APPROVED FASTENERS AND
SPACING (INTO STUDS, MASONRY
OR CONCRETE) REF BA-1 DETAILS

CCW MEMBRANE AIR
BARRIER (REF BA-0C
OR BA-2C DETAILS)

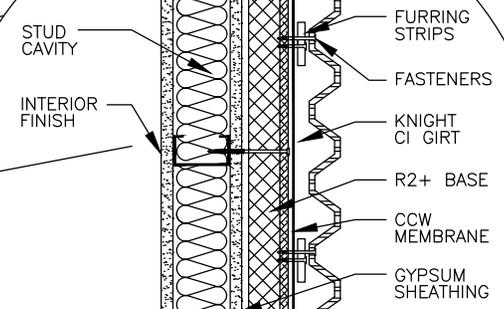
FURRING STRIPS OR
SHIMS TO SPACE METAL
FROM MEMBRANE SURFACE

PROVIDE MINIMUM 1/4"
SPACE BETWEEN SHEET METAL
AND CCW MEMBRANE TO
PROMOTE DRAINAGE AND
DRYING

R2+ BASE (PLYWOOD
FACING EXTERIOR)

SHEET METAL CLADDING
(REF BA-0C DETAILS)

FASTEN SHEET METAL
THROUGH FURRING/SHIMS
INTO PLYWOOD FACE OF R2+
BASE USING CODE-APPROVED
FASTENERS AND SPACING



CROSS SECTION
(PLAN VIEW)

NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN
NFPA 285 WALL ASSEMBLIES. USE WALL
ASSEMBLY COMPONENTS AS LISTED IN BA-0B
AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR
R2+ INSULATION INSTALLATION ONLY.

R2+® BASE SYSTEM

SHEET METAL CLADDING
ATTACHMENT TO R2+ BASE



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BA-6B

APPROVED FASTENERS AND SPACING (INTO STUDS, MASONRY OR CONCRETE) REF BA-1 DETAILS

APPROVED BEAD FOAM IN JOINTS EXCEEDING 1/8" (REF BA-0B, 0C)

CCW MEMBRANE AIR BARRIER (REF BA-0C OR BA-2C DETAILS)

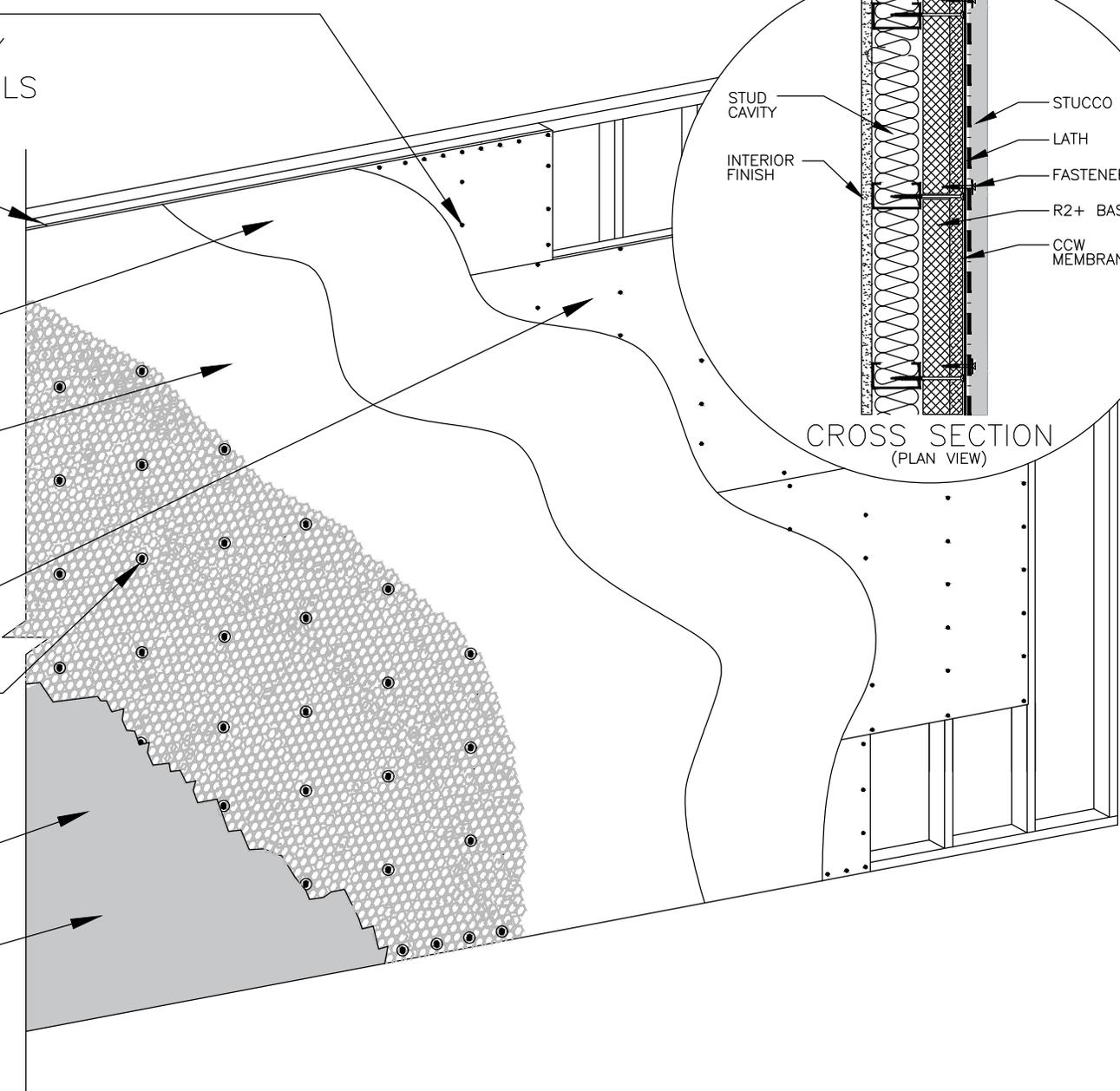
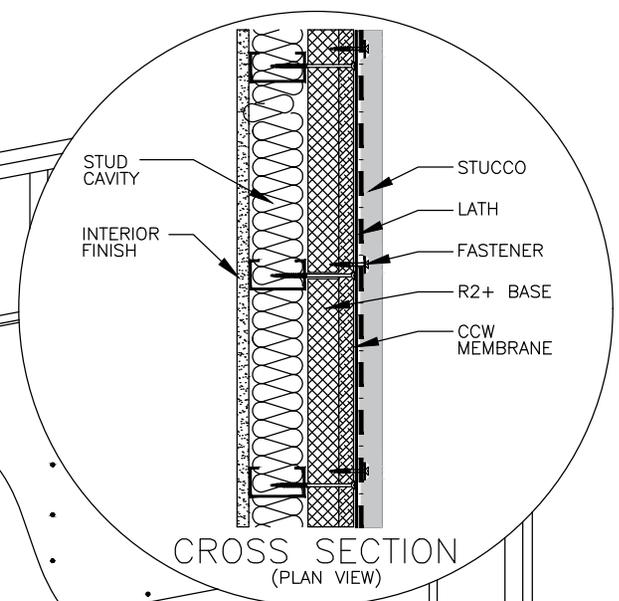
15# FELT OR BUILDING WRAP AS SLIP SHEET BETWEEN STUCCO SYSTEM AND CCW MEMBRANE

R2+ BASE (PLYWOOD FACING EXTERIOR)

FASTEN LATH TO PLYWOOD FACE OF R2+ BASE USING CODE-APPROVED FASTENERS AND SPACING

CEMENT STUCCO SYSTEM OVER SELF-FURRING, EXPANDED LATH

STUCCO CLADDING (REF BA-0C DETAILS)



NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

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BA-6C

R2+® BASE SYSTEM
 STUCCO ATTACHMENT
 TO R2+ BASE

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APPROVED FASTENERS AND SPACING (INTO STUDS, MASONRY OR CONCRETE) REF BA-1 DETAILS

APPROVED BEAD FOAM IN JOINTS EXCEEDING 1/8" (REF BA-0B, 0C)

CCW MEMBRANE AIR BARRIER (REF BA-0C OR BA-2C DETAILS)

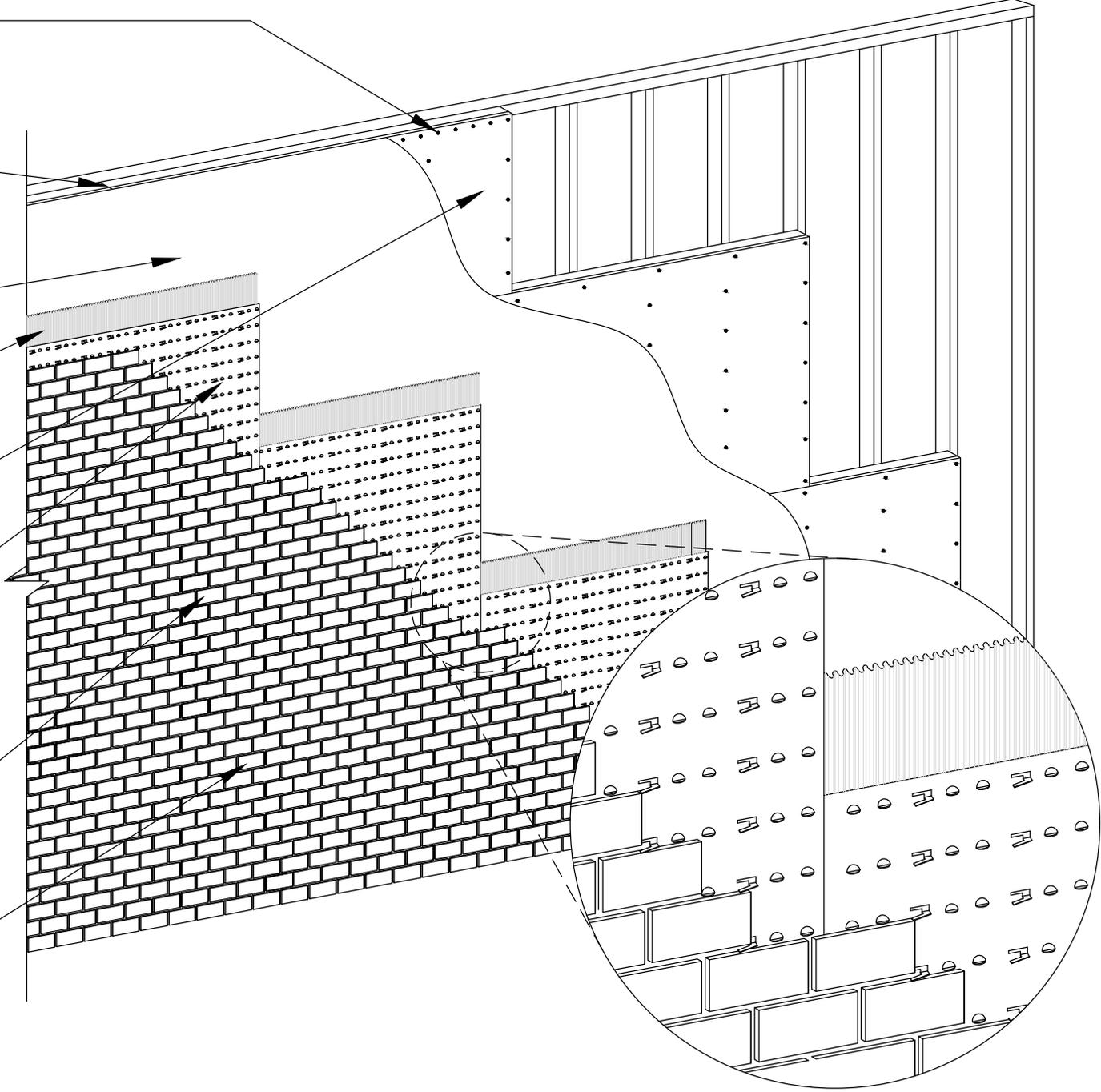
TABS II RAIN SCREEN PANEL

R2+ BASE (PLYWOOD FACING EXTERIOR)

TABS II STRUCTURAL PANEL, ATTACHED TO PLYWOOD FACE OF R2+ BASE W/ FASTENERS AND SPACING AS RECOMMENDED BY TABS WALL SYSTEMS

THIN BRICK SECURED AND MORTARED ACCORDING TO TABS WALL SYSTEMS RECOMMENDATIONS

THIN BRICK AS RECOMMENDED BY TABS WALL SYSTEMS



NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

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BA-6D

R2+® BASE SYSTEM

TABS II THIN BRICK SYSTEM ATTACHMENT TO R2+ BASE



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APPROVED FASTENERS AND SPACING (INTO STUDS, MASONRY OR CONCRETE) REF BA-1 DETAILS

APPROVED BEAD FOAM IN JOINTS EXCEEDING 1/8" (REF BA-0B, 0C)

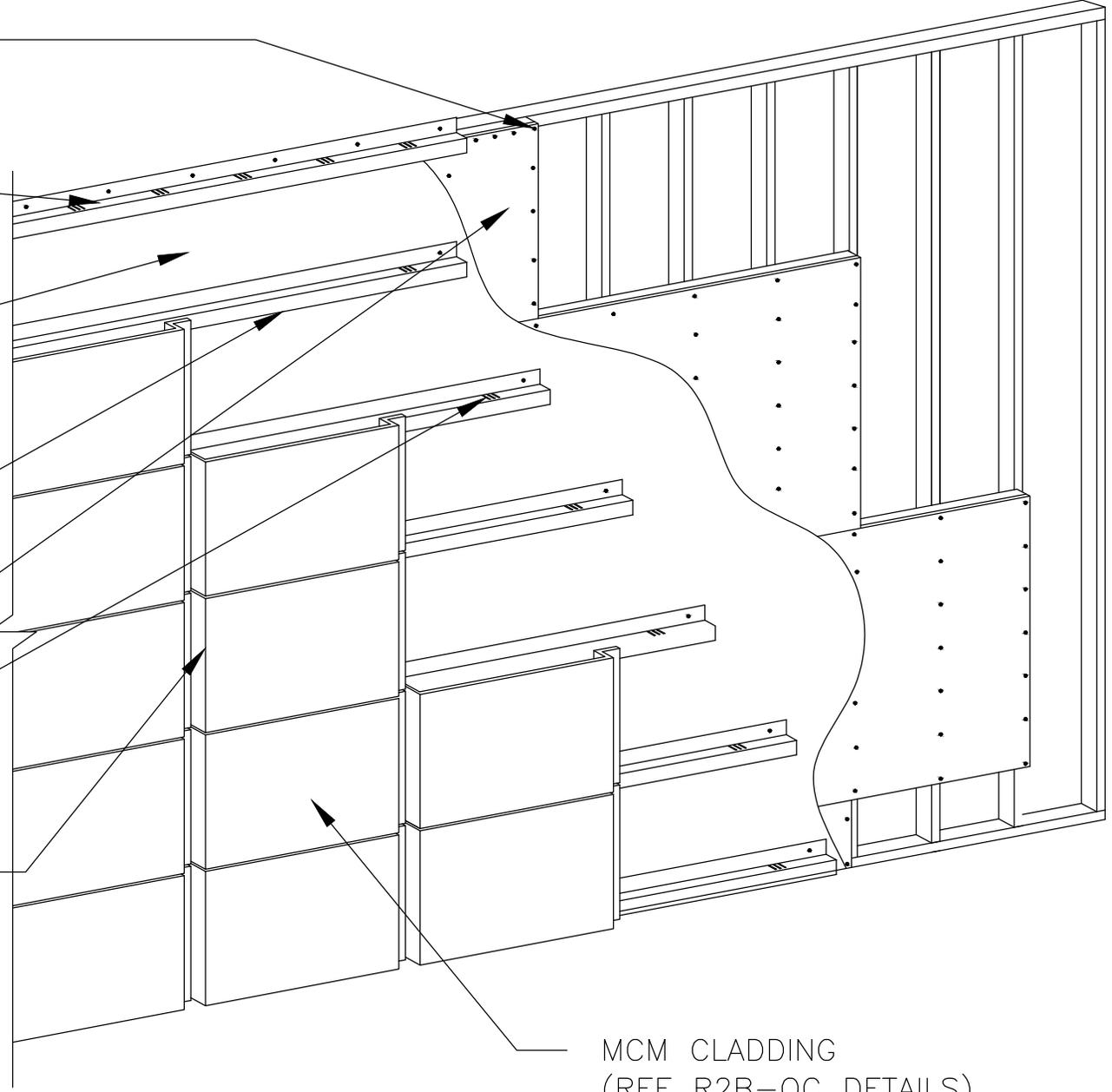
CCW MEMBRANE AIR BARRIER (REF BA-0C OR BA-2C DETAILS)

METAL Zs OR OTHER APPROVED MOUNTING HARDWARE FASTENED TO PLYWOOD FACE OF R2+ BASE

R2+ BASE (PLYWOOD FACING EXTERIOR)

FOR HORIZONTAL Z'S: PROVIDE DRAINAGE WITH PERFORATED Z OR USE SHIM/WASHER TO MAKE SPACE BETWEEN Z AND CCW MEMBRANE

FASTEN MCM PANEL TO METAL Z'S OR OTHER APPROVED HARDWARE. USE CODE-APPROVED FASTENING AND SPACING TO ATTACH PANELS AND MOUNTING HARDWARE



MCM CLADDING (REF R2B-0C DETAILS)

NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

R2+® BASE SYSTEM

METAL COMPOSITE CLADDING

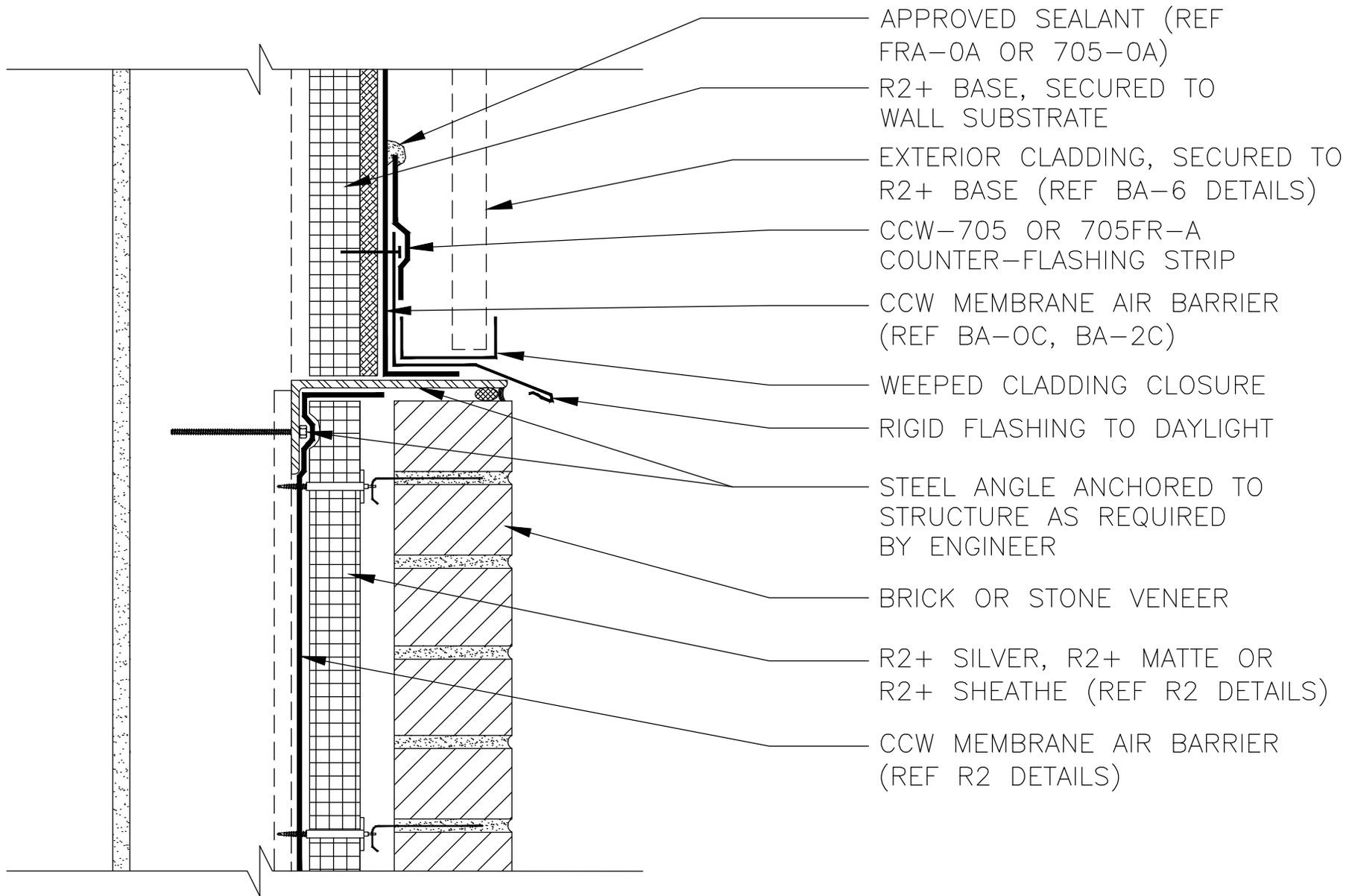
ATTACHMENT TO R2+ BASE

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BA-6E



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NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

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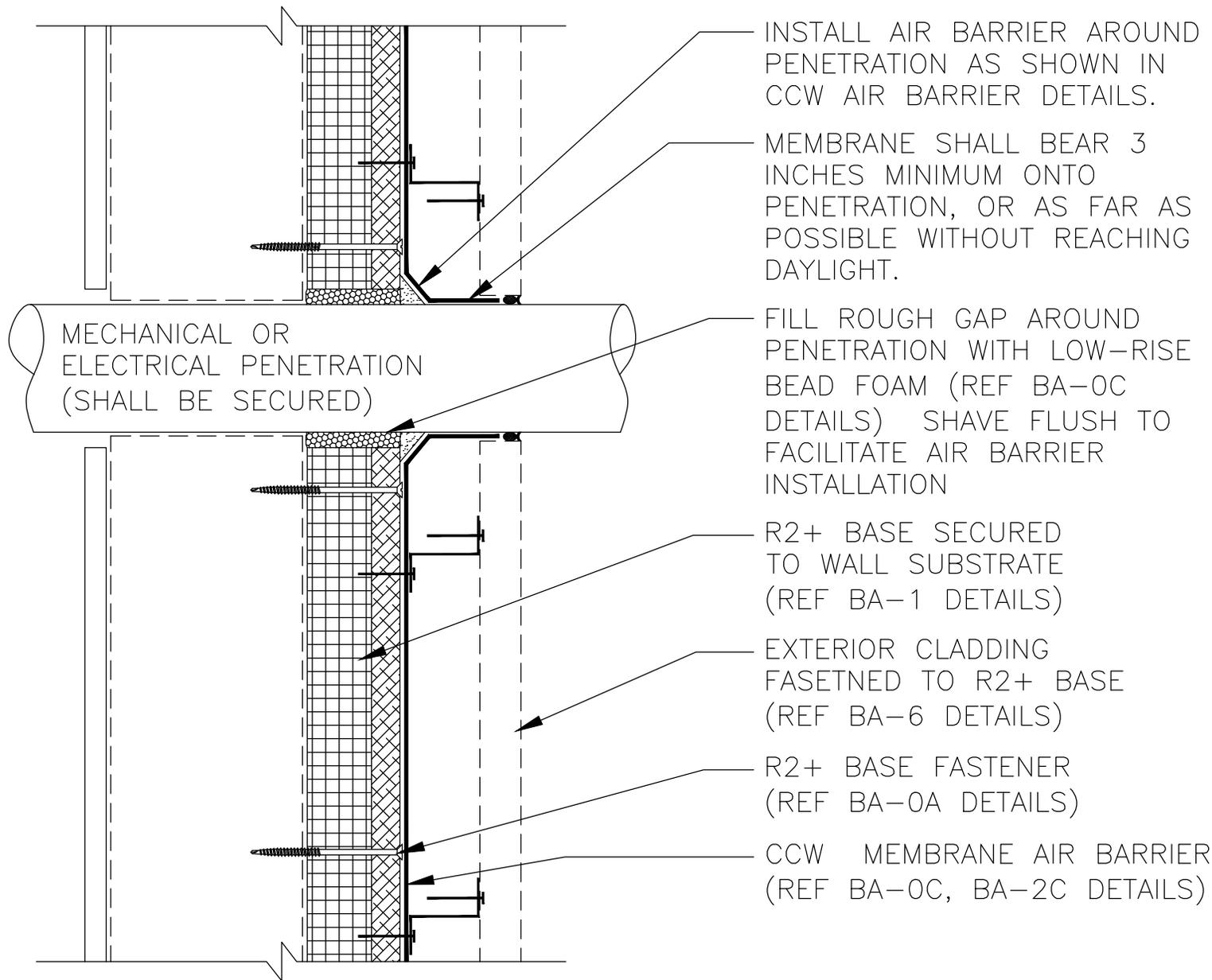
N.T.S.

BA-7

R2+[®] BASE SYSTEM
 LIGHT TO HEAVY
 CLADDING TRANSITION



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NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

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BA-8

R2+® BASE SYSTEM

R2+ BASE MECHANICAL/
ELECTRICAL PENETRATION



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APPROVED CARLISLE ROOF SYSTEM TERMINATION, INCLUDING EDGING AND SECUREMENT (REFER TO CARLISLE ROOF DETAILS)

LAP WALL MEMBRANE AND ROOF MEMBRANE (REFER TO CARLISLE ENVELOP DETAILS)

CCW MEMBRANE AIR BARRIER (REF BA-0C, BA-2C DETAILS)

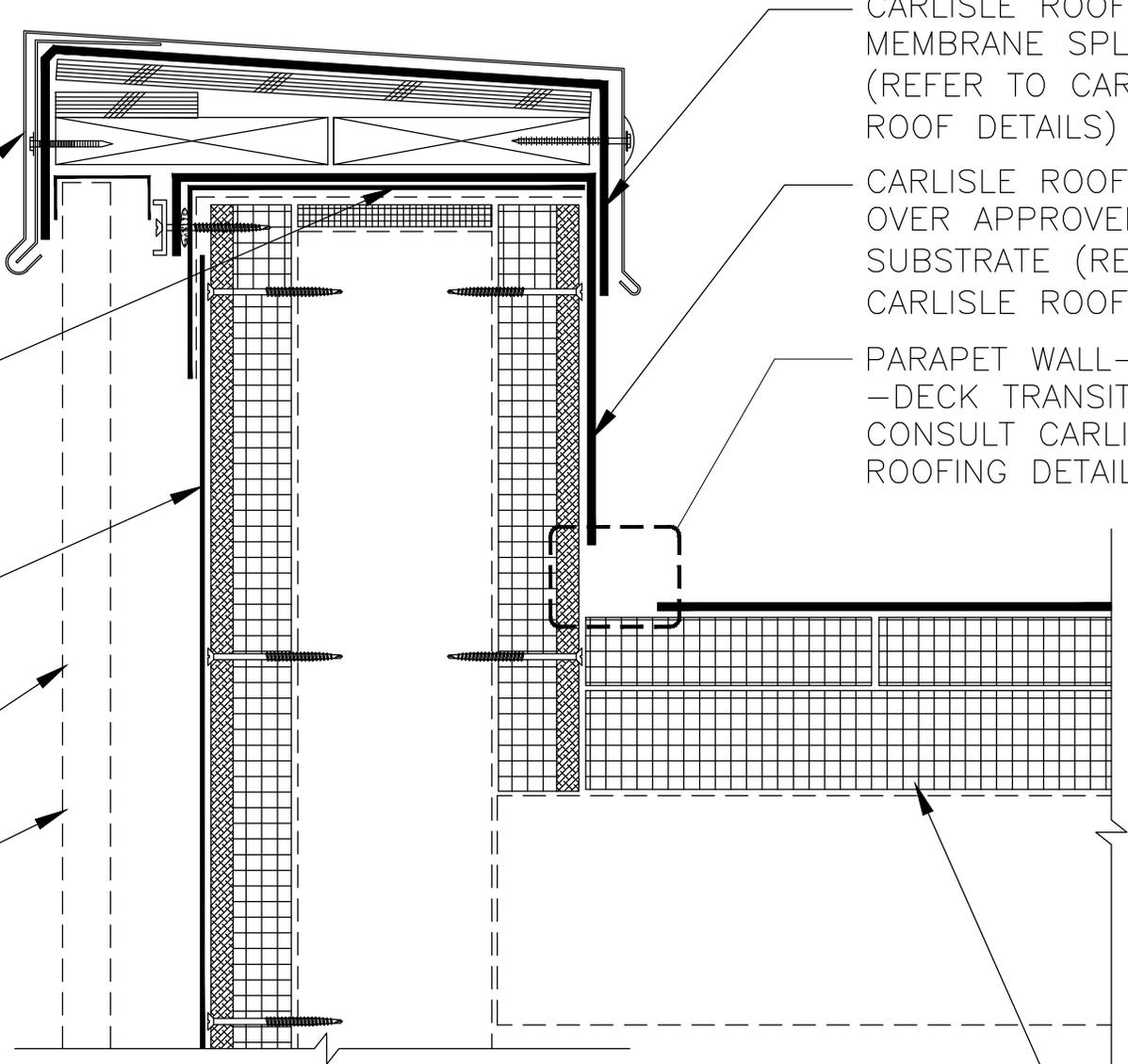
EXTERIOR CLADDING, SECURED TO R2+ BASE (REF BA-6 DETAILS)

R2+ BASE, SECURED TO WALL SUBSTRATE (REF BA-1 DETAILS)

CARLISLE ROOF MEMBRANE SPLICE (REFER TO CARLISLE ROOF DETAILS)

CARLISLE ROOF MEMBRANE OVER APPROVED SUBSTRATE (REFER TO CARLISLE ROOF DETAILS)

PARAPET WALL-TO-DECK TRANSITION, CONSULT CARLISLE ROOFING DETAILS



CARLISLE ROOF ASSEMBLY OVER APPROVED DECK, INCLUDING MEMBRANE, INSULATION AND ACCESSORIES (REFER TO CARLISLE ROOF DETAILS)

NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

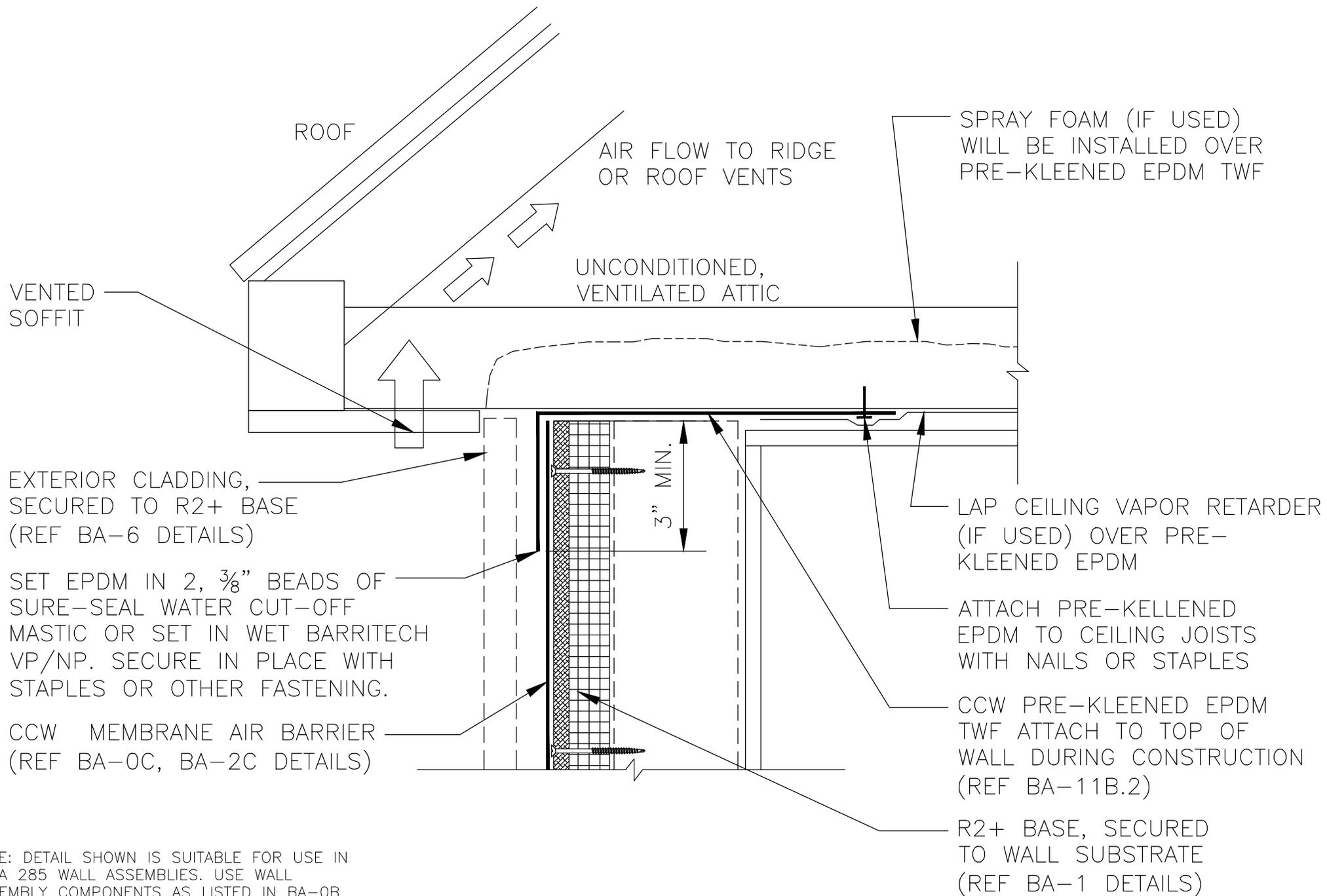
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BA-11A

R2+® BASE SYSTEM
 R2+ BASE TIE-IN TO
 CARLISLE ROOF AT PARAPET



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NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

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BA-11B.1

R2+® BASE SYSTEM

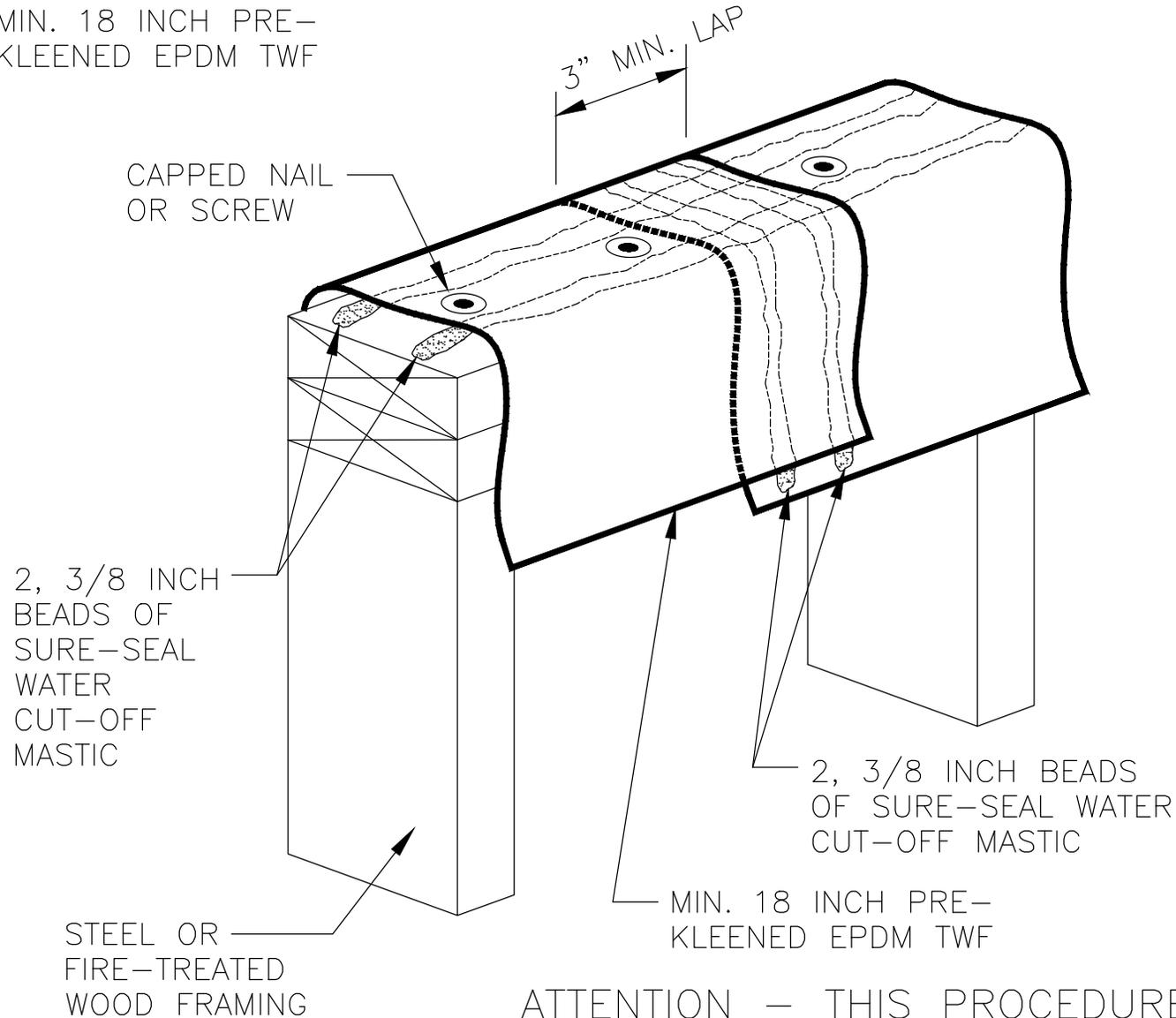
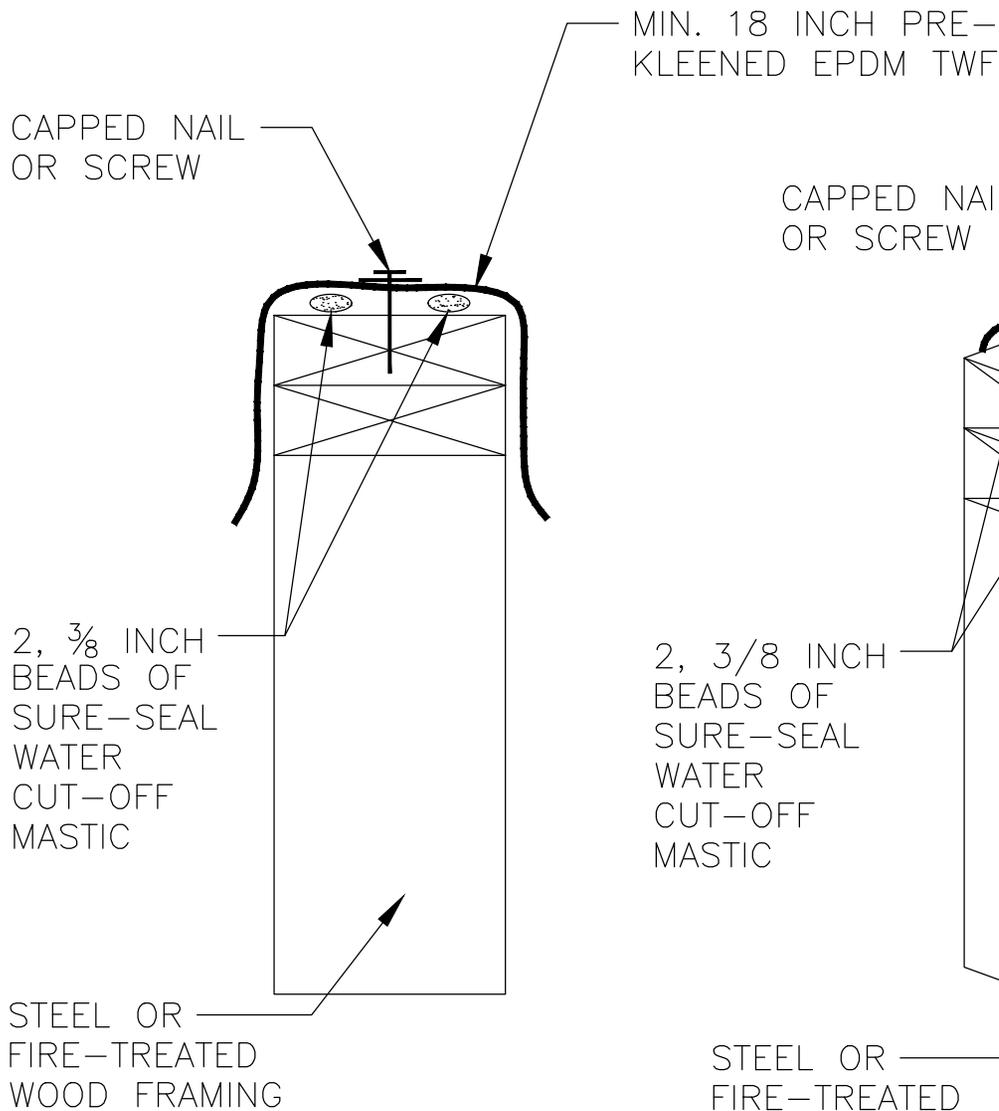
R2+ BASE TERMINATION AT ATTIC



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SECTION

ISOMETRIC



ATTENTION – THIS PROCEDURE MUST BE DONE BEFORE ROOF TRUSSES ARE INSTALLED

NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

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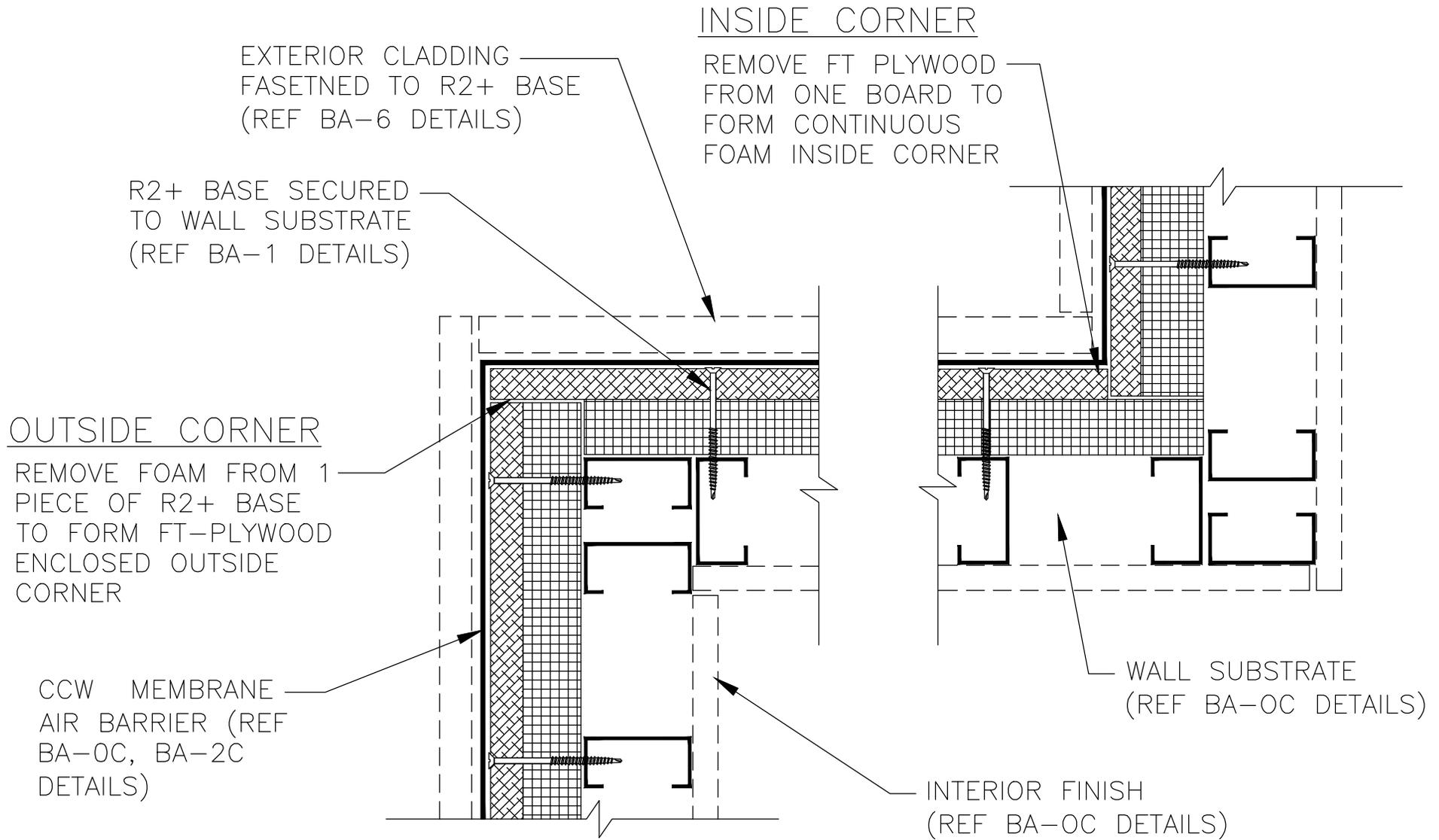
BA-11B.2

R2+® BASE SYSTEM

INSTALLATION OF PRE-KLEENED EPDM TWF OVER TOP OF WALL FOR ATTIC TERMINATION DETAIL



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NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

R2+[®] BASE SYSTEM

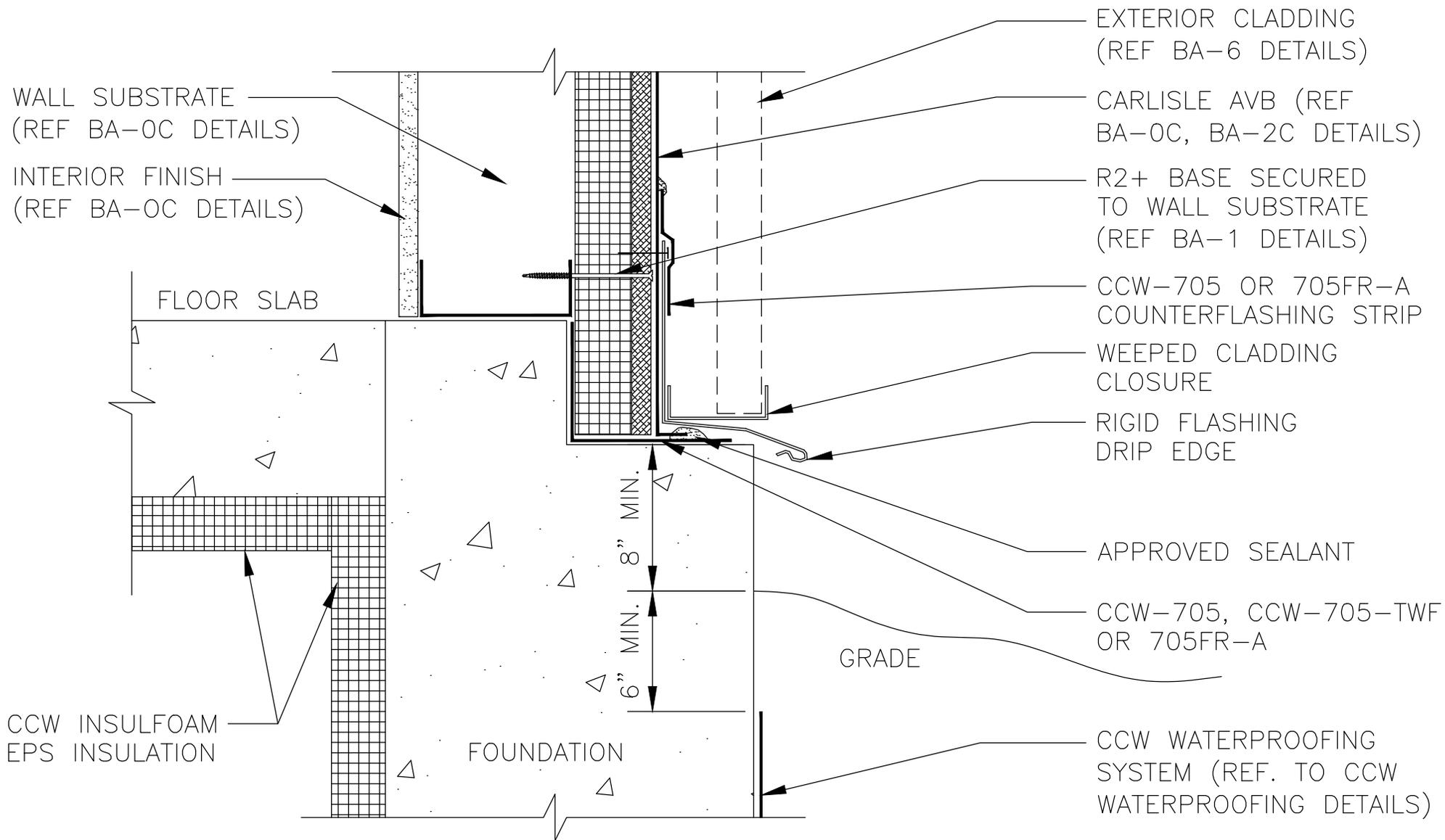
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BA-15

OUTSIDE/INSIDE CORNERS



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NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

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N.T.S.

BA-16A

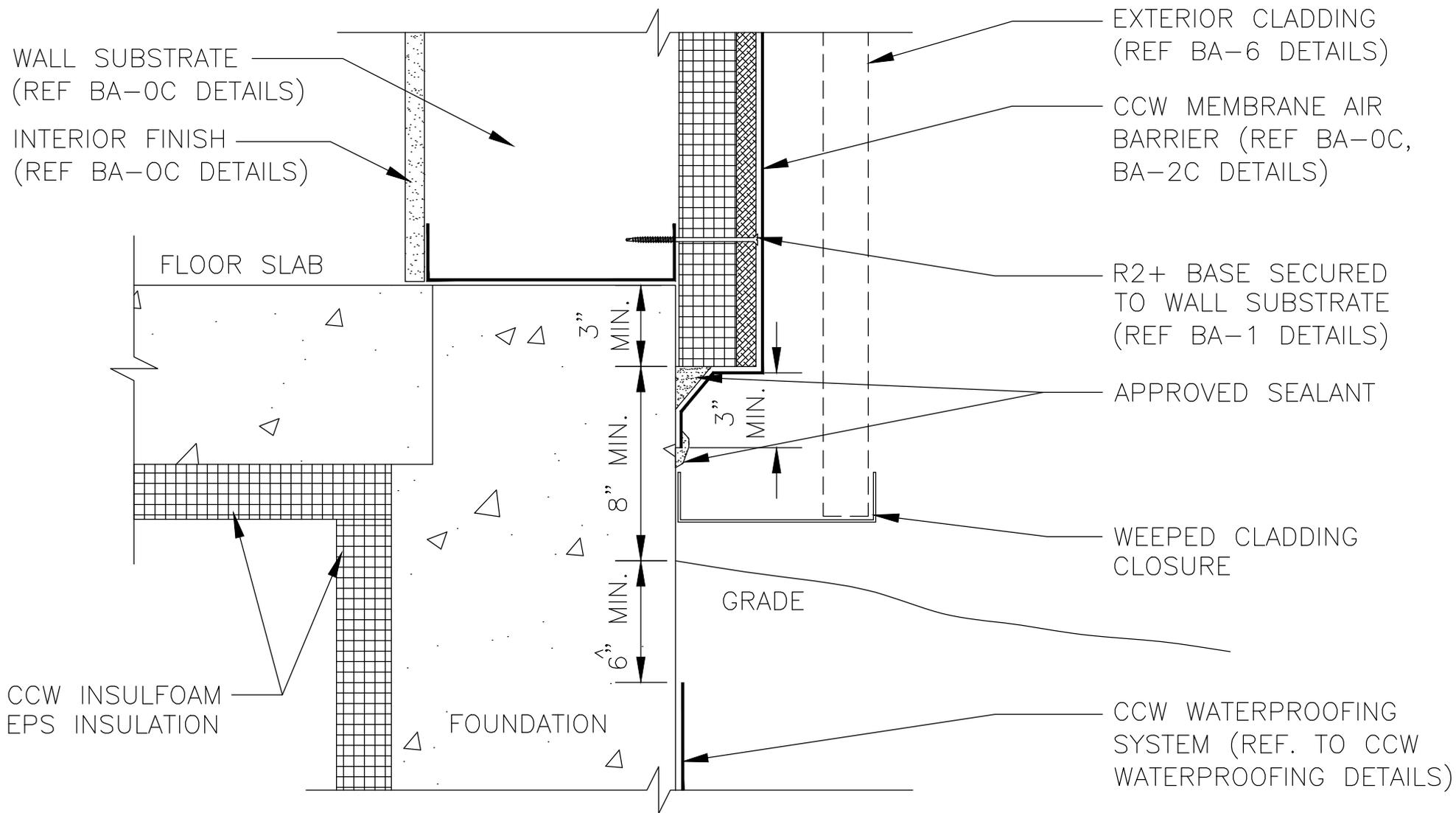
R2+® BASE SYSTEM

R2+ BASE TERMINATION

AT GRADE - 1



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NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

08/03/2020 | N.T.S.

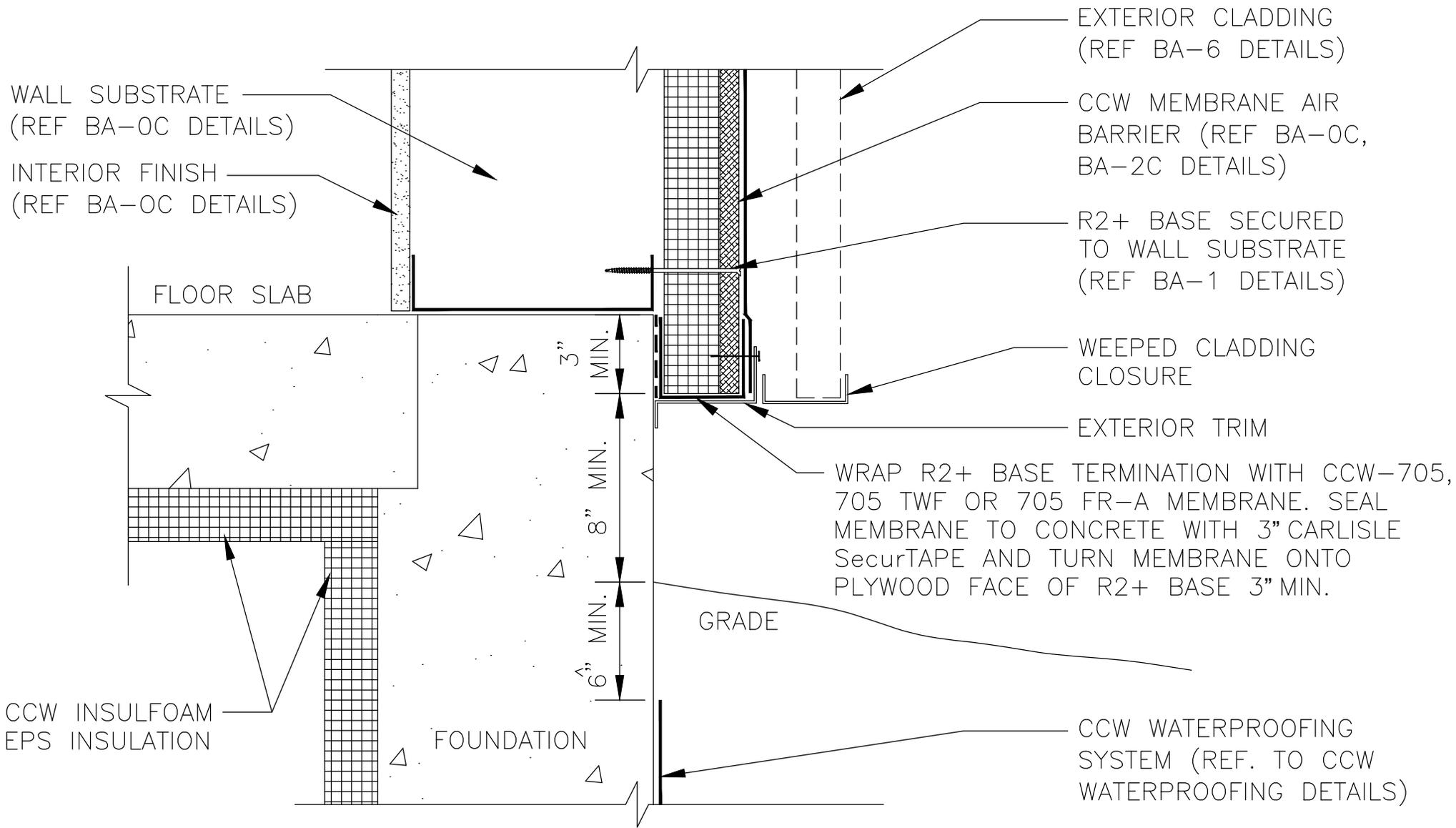
BA-16B

R2+® BASE SYSTEM

R2+ BASE TERMINATION
AT GRADE - 2



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NOTE: DETAIL SHOWN IS SUITABLE FOR USE IN NFPA 285 WALL ASSEMBLIES. USE WALL ASSEMBLY COMPONENTS AS LISTED IN BA-0B AND BA-0C.

DETAIL IS INTENDED TO BE A GUIDE FOR R2+ INSULATION INSTALLATION ONLY.

08/03/2020

N.T.S.

BA-16C

R2+[®] BASE SYSTEM

R2+ BASE TERMINATION AT GRADE - 3

CARLISLE
COATINGS & WATERPROOFING

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