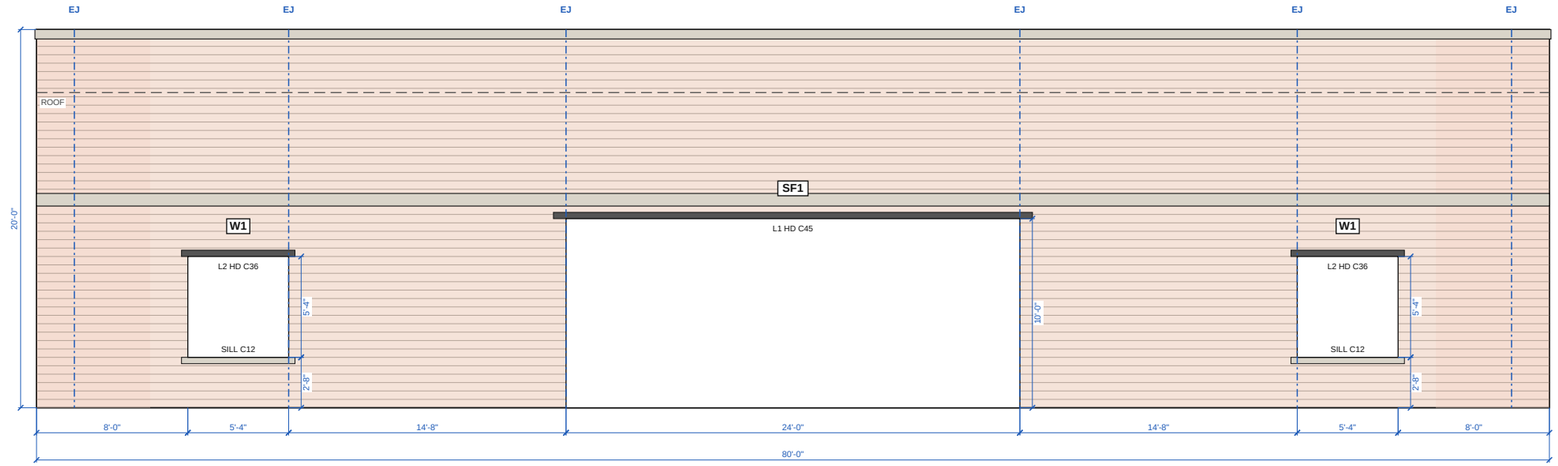
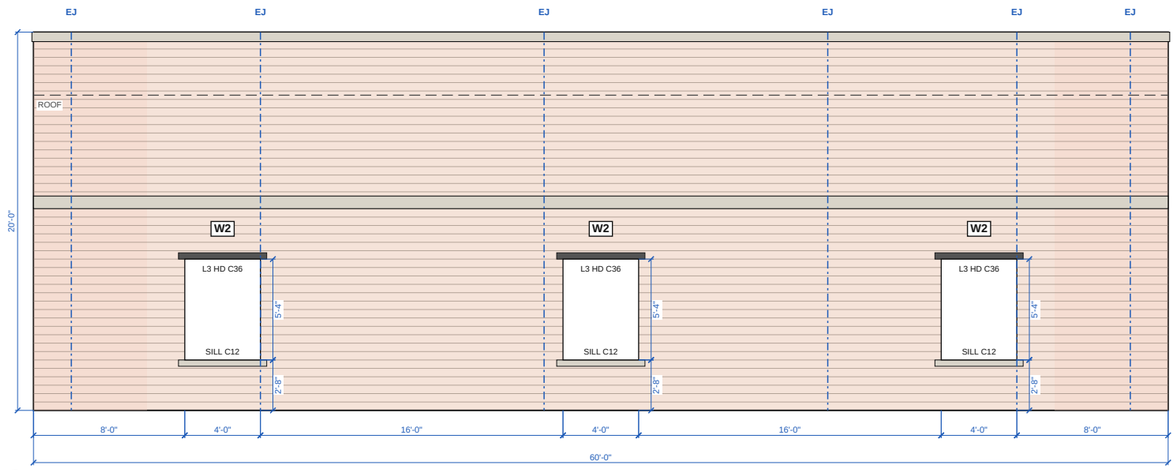


1 WALL 1 (SOUTH, FRONT), EVERY 2 COURSES SHOWN, 3 COURSES = 8"

SCALE: 1/8" = 1'-0"



2 WALL 2 (EAST), EVERY 2 COURSES SHOWN, 3 COURSES = 8"

SCALE: 1/8" = 1'-0"

PREPARED BY

PROJECT

Sample Retail Building, CMU and brick

Client: Sample Development Group

NOTICE

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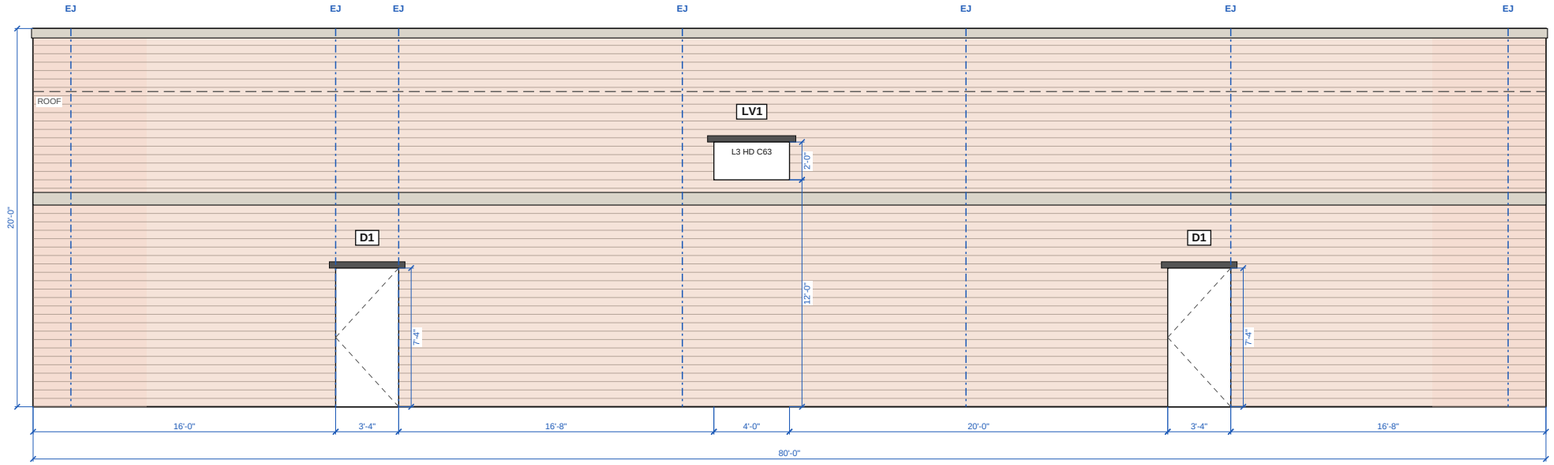
SCALE
1/8" = 1'-0"

DRAWN BY

SHEET SIZE
ANSI B (11" x 17")

SHEET TITLE
WALL ELEVATIONS AND COURSING

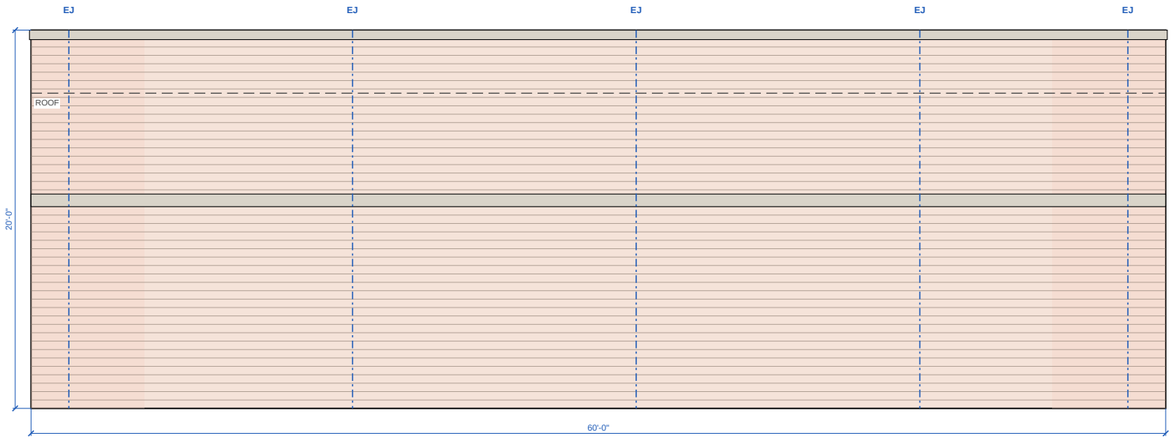
A4-1



1

WALL 3 (NORTH, SERVICE), EVERY 2 COURSES SHOWN, 3 COURSES = 8"

SCALE: 1/8" = 1'-0"



2

WALL 4 (WEST), EVERY 2 COURSES SHOWN, 3 COURSES = 8"

SCALE: 1/8" = 1'-0"

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SCALE

1/8" = 1'-0"

DRAWN BY

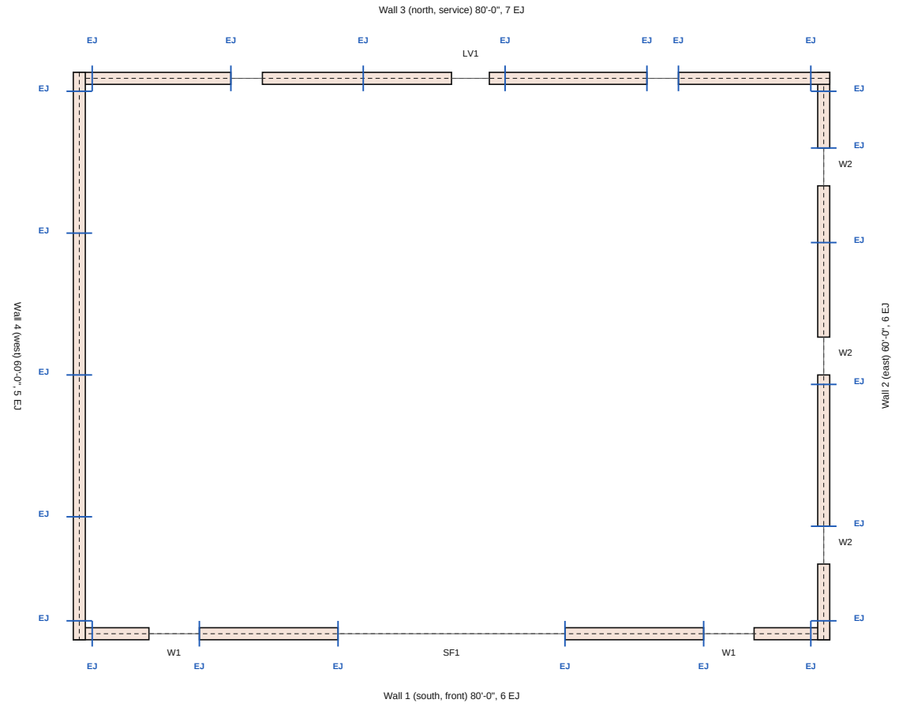
SHEET SIZE

ANSI B (11" x 17")

SHEET TITLE

WALL ELEVATIONS AND COURSING

A4-2



1 PLAN: WALLS, PIERS AND MOVEMENT JOINTS

SCALE: 1/16" = 1'-0"

PREPARED BY

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Sample Retail Building, CMU and brick

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11/11/2026

SCALE
1/16" = 1'-0"

DRAWN BY

SHEET SIZE
ANSI B (11" x 17")

SHEET TITLE

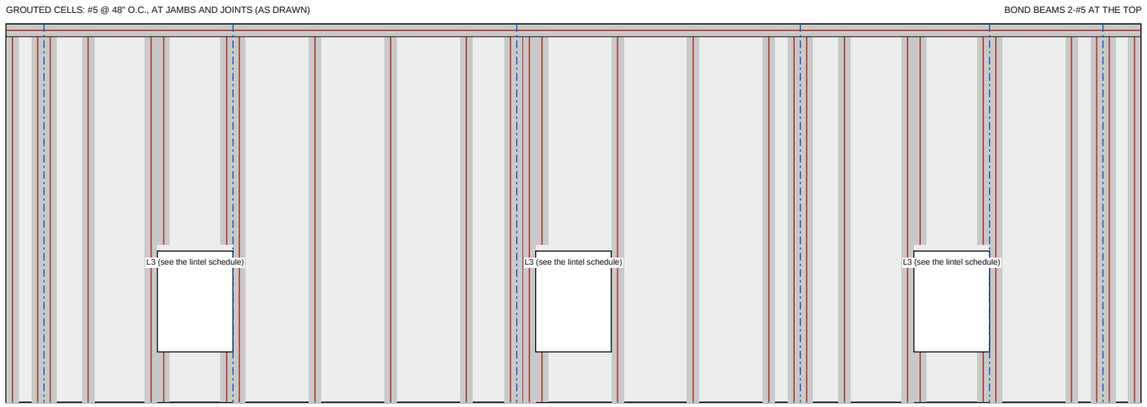
PLAN AND MOVEMENT JOINTS

A4-3



1 WALL 1 (SOUTH, FRONT) REINFORCING (AS DRAWN)

SCALE: 1/8" = 1'-0"



2 WALL 2 (EAST) REINFORCING (AS DRAWN)

SCALE: 1/8" = 1'-0"

PREPARED BY

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SCALE

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SHEET SIZE

ANSI B (11" x 17")

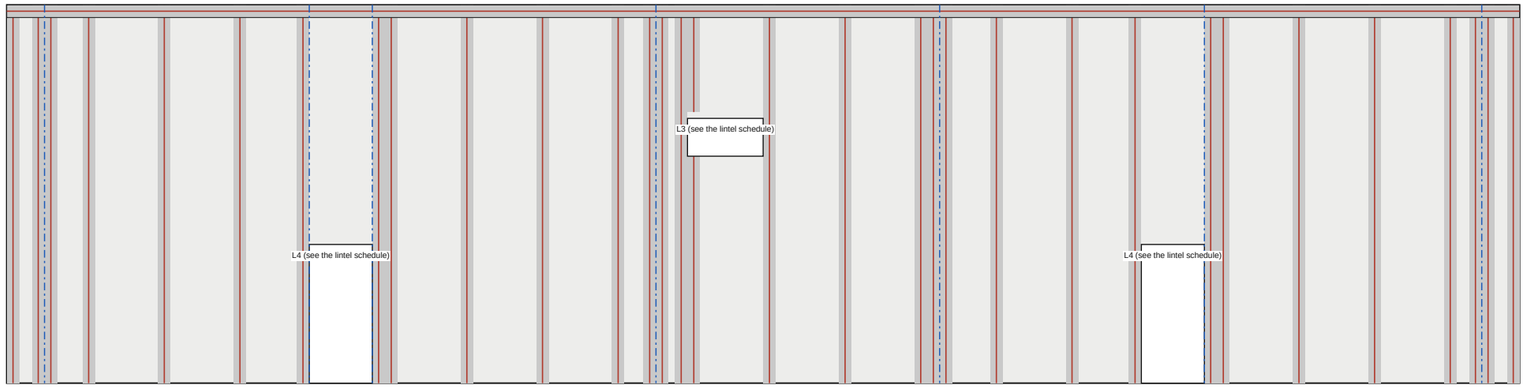
SHEET TITLE

REINFORCING ELEVATIONS (AS DRAWN)

A4-4

GROUTED CELLS: #5 @ 48" O.C., AT JAMBS AND JOINTS (AS DRAWN)

BOND BEAMS 2-#5 AT THE TOP

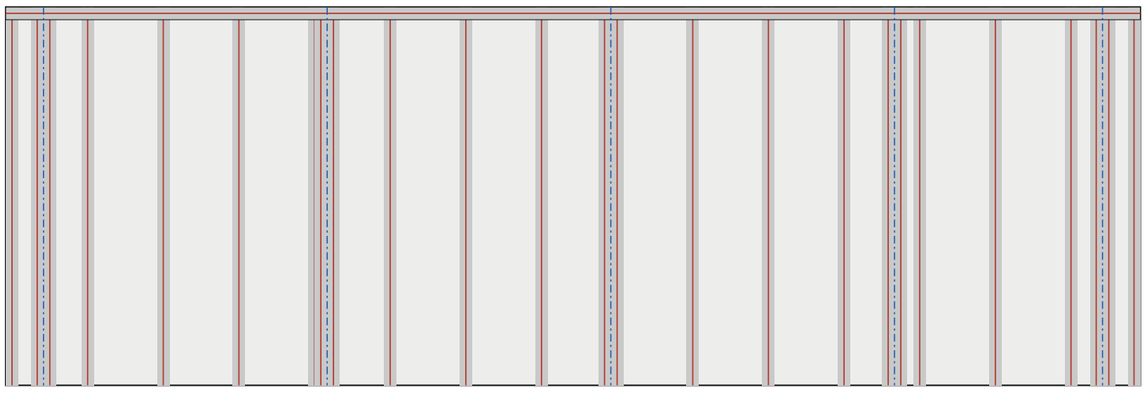


1 WALL 3 (NORTH, SERVICE) REINFORCING (AS DRAWN)

SCALE: 1/8" = 1'-0"

GROUTED CELLS: #5 @ 48" O.C., AT JAMBS AND JOINTS (AS DRAWN)

BOND BEAMS 2-#5 AT THE TOP



2 WALL 4 (WEST) REINFORCING (AS DRAWN)

SCALE: 1/8" = 1'-0"

PREPARED BY

PROJECT

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SCALE

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DRAWN BY

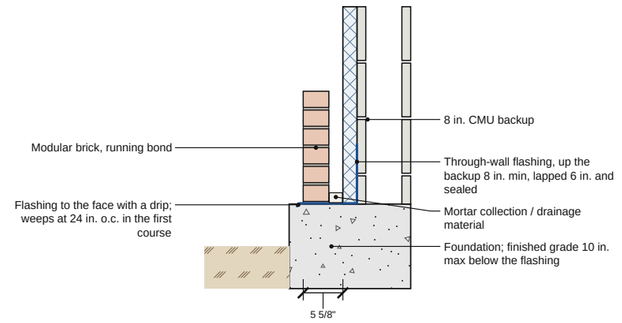
SHEET SIZE

ANSI B (11" x 17")

SHEET TITLE

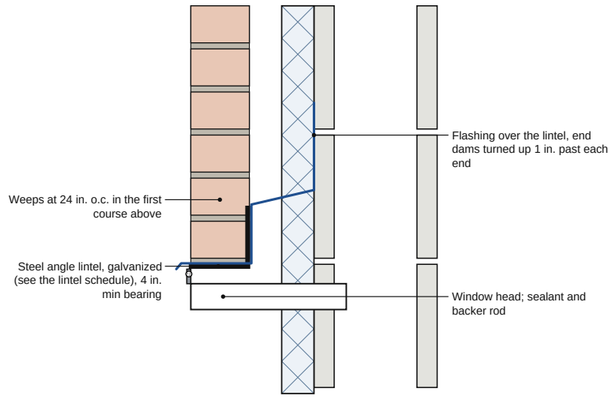
REINFORCING ELEVATIONS (AS DRAWN)

A4-5



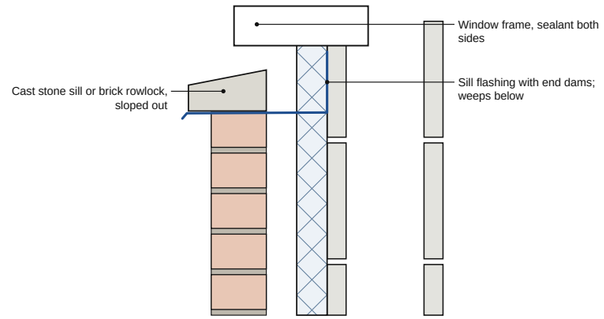
1 **VENEER BASE: WT1** NTS

REF: IBC 2021 1404.4.2; BIA TN 7; BIA TN 3C



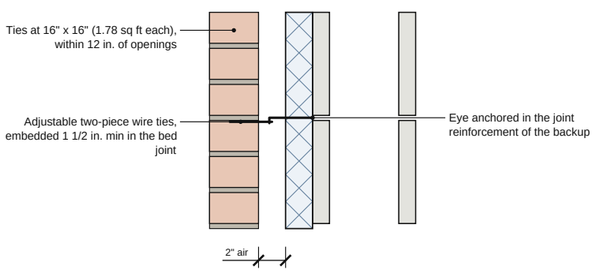
2 **HEAD AT A STEEL ANGLE LINTEL: WT1** NTS

REF: IBC 2021 1404.4.2; BIA TN 7; BIA TN 3C; IRC 2018 R703.8.3



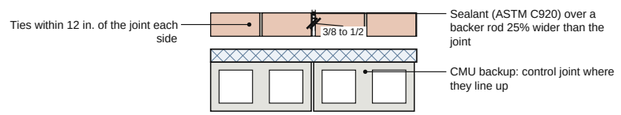
3 **SILL: WT1** NTS

REF: IBC 2021 1404.4.2; BIA TN 7; BIA TN 3C



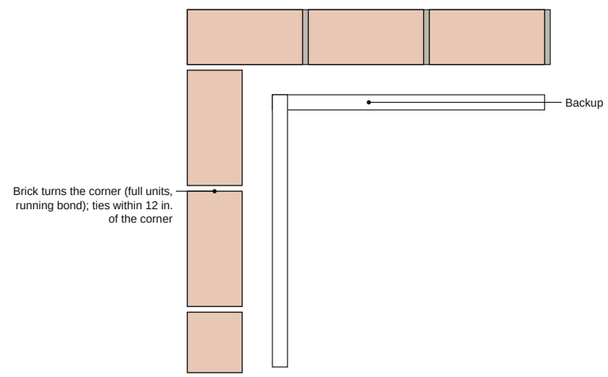
4 **VENEER TIE: WT1** NTS

REF: BIA TN 3C; BIA TN 28A



5 **EXPANSION JOINT IN THE BRICK (PLAN): WT1** NTS

REF: BIA TN 18A



6 **OUTSIDE CORNER (PLAN): WT1** NTS

REF: BIA TN 3C

Typical detail, not to scale. Not an engineered design: verify with your building department and the manufacturer's installation instructions.

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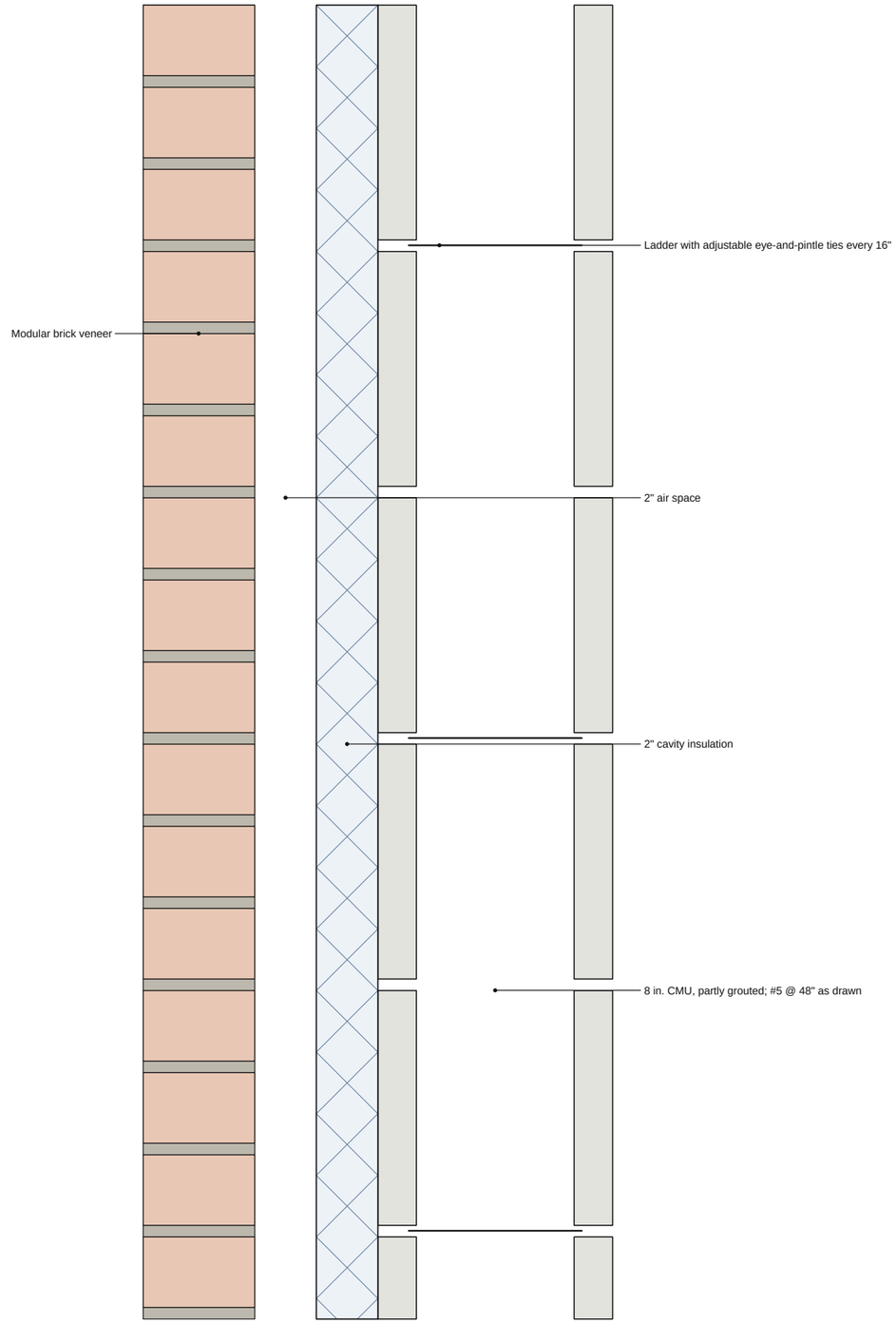
DRAWN BY

SHEET SIZE **ANSI B (11" x 17")**

SHEET TITLE

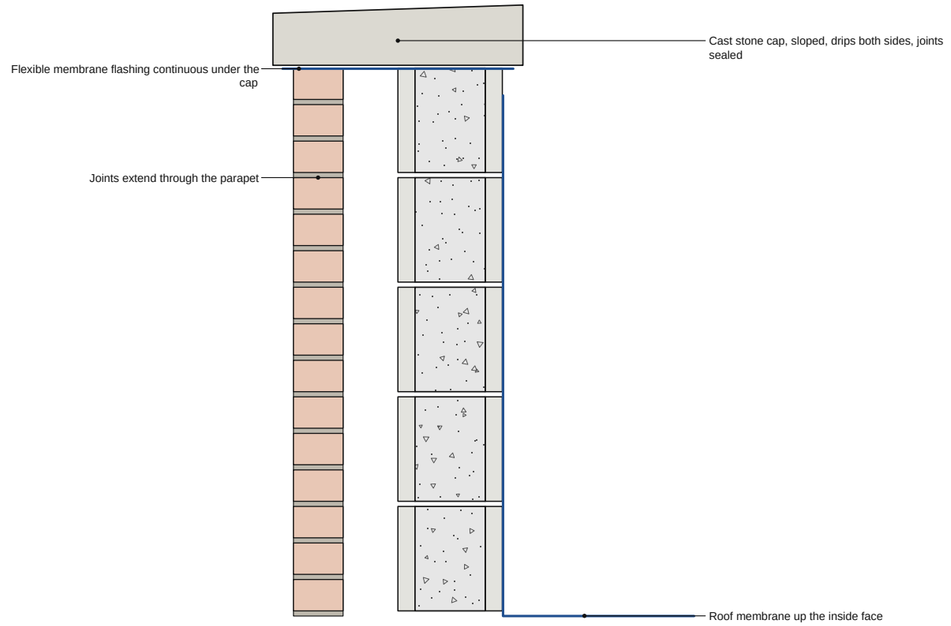
SECTIONS AND DETAILS

A4-6



7 **CAVITY WALL: WT1** — NTS

REF: BIA TN 3C; NCMA TEK 10-2C



8 **PARAPET AND CAST STONE CAP** — NTS

REF: BIA TN 7; BIA TN 18A

Typical detail, not to scale. Not an engineered design: verify with your building department and the manufacturer's installation instructions.

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SHEET SIZE **ANSI B (11" x 17")**

SHEET TITLE

SECTIONS AND DETAILS

A4-7

UNIT, LINTEL, OPENING AND ACCESSORY SCHEDULES

UNIT	NET	ORDER (WASTE)	OF IT SPECIALS	WALLS
Modular brick (4 x 2 2/3 x 8)	33720	35406	-	Wall 1 (south, front), Wall 2 (east), Wall 3 (north, service), Wall 4 (west)
8 in. CMU, standard (smooth)	5830	6122	2153	Wall 1 (south, front), Wall 2 (east), Wall 3 (north, service), Wall 4 (west)

LINTEL SCHEDULE

TAG	TYPE	SIZE	SPAN	BEARING	LENGTH	QTY	OPENINGS
L1	Steel angle	Steel lintel per the structural drawings (W8 with a plate)	24'-0"	8"	25'-4"	1	SF1
L2	Steel angle	Per the structural drawings (IRC table: L3 x 3 x 1/4)	5'-4"	4"	6'-0"	2	W1
L3	Steel angle	Per the structural drawings (IRC table: L3 x 3 x 1/4)	4'-0"	4"	4'-8"	4	W2, LV1
L4	Steel angle	Per the structural drawings (IRC table: L3 x 3 x 1/4)	3'-4"	4"	4'-0"	2	D1

OPENING SCHEDULE (COURSE NUMBERS FROM THE BOTTOM OF THE MASONRY)

TAG	QTY	TYPE	WALL	MASONRY OPENING	SILL	SILL COURSE	HEAD COURSE	LINTEL
SF1	1	Storefront	Wall 1 (south, front)	24'-0" x 10'-0"	0"	C0	C45	L1
W1	2	Window	Wall 1 (south, front)	5'-4" x 5'-4"	2'-8"	C12	C36	L2
W2	3	Window	Wall 2 (east)	4'-0" x 5'-4"	2'-8"	C12	C36	L3
D1	2	Door	Wall 3 (north, service)	3'-4" x 7'-4"	0"	C0	C33	L4
LV1	1	Louver	Wall 3 (north, service)	4'-0" x 2'-0"	12'-0"	C54	C63	L3

ACCESSORIES

ACCESSORY	WHAT	QUANTITY
Veneer ties	Adjustable two-piece wire ties	2921 each
Joint reinforcement	Ladder with adjustable eye-and-pintle ties	3887 LF
Reinforcing (as drawn)	#5	3960 LF, 4130 lb
Through-wall flashing	base, heads, sills, parapets	633.3 LF, 38 end dams
Weeps	24 in. o.c.	164 each
Mortar collection / drainage	base and shelf angles	249.3 LF
Movement joints	24 joints, sealant and backer rod	480 LF
Mortar Type S	with waste	922.4 cu ft
Grout	with waste	28.91 CY

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SHEET SIZE **ANSI B (11" x 17")**

SHEET TITLE **SCHEDULES**

A4-8

BUY LIST (GENERIC PRODUCTS AT THE CONTRACTOR'S PRICES; INSTALL HOURS)

GROUP	ITEM	QTY	EACH	MATERIAL	HOURS
Units by type	Modular brick (4 x 2 2/3 x 8) (with 5% waste)	35406 each	$1	$30,095	1168.4
Units by type	8 in. CMU, standard (smooth), stretchers (with 5% waste)	3969 each	$3	$11,510	450.9
Units by type	8 in. CMU, standard (smooth), specials (corners, jambs, bond beam and lintel units)	2153 each	$4	$7,815	244.4
Units by type	Cut units at jambs, joints and headers (labor)	2400 each	$0	$0	72
Units by type	Corners, returns and piers (labor, per course)	720 each	$0	$0	57.6
Units by type	Clean masonry (detergent, bucket and brush; per the unit maker)	4996 sf	$0	$600	40
Mortar	Masonry cement, Type S (922.4 cu ft of mortar, 34.16 CY, 20% waste)	308 bag	$14	$4,312	0
Mortar	Mortar sand	36.9 ton	$38	$1,402	0
Grout	Grout, coarse (TMS 602 2.2), 10% waste	28.91 CY	$210	$6,071	34.7
Reinforcing	#5 bars, vertical and horizontal as drawn (3960 LF with laps, 2.07 tons)	4130 lb	$1	$3,924	49.6
Joint reinforcement	Ladder with adjustable eye-and-pintle ties, 10 ft pieces with 6 in. laps (410 pcs)	3887 LF	$1	$2,138	15.5
Joint reinforcement	Prefabricated corners and tees	120 each	$6	$720	0
Bond beams & lintels	Bond beams (units, grout and bars counted above)	280 LF	$0	$0	14
Bond beams & lintels	L1 steel angle lintel Steel lintel per the structural drawings (W8 with a plate), 25'-4" long (8" bearing each end), galvanized	25.3 LF	$22	$557	6.3
Bond beams & lintels	L2 steel angle lintel Per the structural drawings (IRC table: L3 x 3 x 1/4), 6'-0" long (4" bearing each end), galvanized	12 LF	$22	$264	3
Bond beams & lintels	L3 steel angle lintel Per the structural drawings (IRC table: L3 x 3 x 1/4), 4'-8" long (4" bearing each end), galvanized	18.7 LF	$22	$411	4.7
Bond beams & lintels	L4 steel angle lintel Per the structural drawings (IRC table: L3 x 3 x 1/4), 4'-0" long (4" bearing each end), galvanized	8 LF	$22	$176	2
Ties & anchors	Adjustable two-piece wire ties (by the spacing typed, plus ties within 12 in. of openings)	2921 each	$1	$2,483	58.4
Ties & anchors	Cavity insulation board	4996 sf	$1	$5,496	60
Flashing & weeps	Through-wall flashing (base 249, heads 70, sills 34, parapet 280 LF; 6 in. sealed laps)	665 LF	$3	$2,128	25.3
Flashing & weeps	End dams (turned up 1 in.)	38 each	$6	$228	3
Flashing & weeps	Weeps at 24 in. o.c. above every flashing	164 each	$0	$74	1.6
Flashing & weeps	Mortar collection / drainage material at the base and shelf angles	249.3 LF	$2	$598	5
Joints & sealant	Sealant (ASTM C920) at 24 movement joints	480 LF	$2	$768	19.2
Joints & sealant	Backer rod (25% over the joint width)	480 LF	$0	$96	0
Cast stone	Cast stone sills (with horns) (26 LF)	26 LF	$32	$832	11.7
Cast stone	Cast stone bands and water tables (280 LF)	280 LF	$30	$8,400	98
Cast stone	Cast stone caps and copings (280 LF)	280 LF	$42	$11,760	140
Scaffold	Frame scaffold, Wall 1 (south, front) (1600 sf of face, 1 month)	1600 sf-mo	$0	$288	24
Scaffold	Frame scaffold, Wall 2 (east) (1200 sf of face, 1 month)	1200 sf-mo	$0	$216	18
Scaffold	Frame scaffold, Wall 3 (north, service) (1600 sf of face, 1 month)	1600 sf-mo	$0	$288	24
Scaffold	Frame scaffold, Wall 4 (west) (1200 sf of face, 1 month)	1200 sf-mo	$0	$216	18
Weather protection	Heat mortar materials (days below 40 F)	14 day	$120	$1,680	14
Weather protection	Weather-resistive covers, 24 h (days 40 to 25 F)	943 sf	$0	$75	0
Weather protection	Insulating blankets, 48 h grouted / 24 h (days 25 to 20 F)	754 sf	$0	$264	4
Equipment	Mortar mixer	53 day	$85	$4,505	0
Equipment	Forklift / telehandler	53 day	$420	$22,260	0
Testing & inspection	Prism tests (sets)	1 set	$450	$450	0
Testing & inspection	Grout samples (sets)	1 set	$120	$120	0.5
Testing & inspection	Mortar samples (sets)	1 set	$110	$110	0.5
Testing & inspection	Special inspection (by the owner's agency per ch. 17 unless the contract says otherwise)	14 day	$950	$13,300	0
TOTAL	Priced from the itemized takeoff			$146,630	2688.3

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SCALE

NTS

DRAWN BY

SHEET SIZE

ANSI B (11" x 17")

SHEET TITLE

BUY LIST

A4-9

CHECKS AND NOTES

RESULT	WHAT	CHECK	SOURCE
CHECKS AND FLAGS, NOT AN ENGINEERED DESIGN			
NOTE	Wall 1 (south, front)	#5 @ 48" vertical, bond beams at the top, laps 48 bar diameters: counted as drawn. Reinforcing per the structural drawings (the designer counts it, it does not design it).	Per the structural drawings
NOTE	Wall 2 (east)	#5 @ 48" vertical, bond beams at the top, laps 48 bar diameters: counted as drawn. Reinforcing per the structural drawings (the designer counts it, it does not design it).	Per the structural drawings
NOTE	Wall 3 (north, service)	#5 @ 48" vertical, bond beams at the top, laps 48 bar diameters: counted as drawn. Reinforcing per the structural drawings (the designer counts it, it does not design it).	Per the structural drawings
NOTE	Wall 4 (west)	#5 @ 48" vertical, bond beams at the top, laps 48 bar diameters: counted as drawn. Reinforcing per the structural drawings (the designer counts it, it does not design it).	Per the structural drawings
NOTE	Cold weather	10 days 40 to 25 F: heat mixing water or sand for mortar between 40 and 120 F (not over 140 F), grout over 70 F below 32 F; cover new masonry with a weather-resistive membrane for 24 h.	BIA TN 1 (TMS 602-16 1.8 C, 1.8 D); IBC 2021 2104.1
NOTE	Cold weather	4 days 25 to 20 F: heat masonry surfaces both sides to 40 F, windbreaks over 15 mph; insulating blankets 24 h after completion (48 h grouted).	BIA TN 1 (TMS 602-16 1.8 C, 1.8 D)
NOTE	Seismic	Seismic Design Category C to F: anchored veneer per TMS 402 12.2.2.11 (IBC 2021 1404.6.2; TMS 402-22: the sides and top isolated from the structure, SDC D and higher enhanced ties): set SDC D or higher under Wind when the structural drawings say so.	IBC 2021 1404.6.2; BIA TN 3C (TMS 402-22)
OK	Wall 1 (south, front)	Ties at 16" x 16" (1.78 sq ft per tie, basic prescriptive limit 2.67); ties within 12 in. of openings and joints are counted; first row within 12" of the top, within 16 in. of shelf angles and lintels.	BIA TN 3C (TMS 402-22); IBC 2021 1404.6
OK	Wall 1 (south, front)	Air space 2", cavity 4".	BIA TN 3C (TMS 402-22); BIA TN 7
OK	Wall 1 (south, front)	pveneer 32 psf within the 40 psf for basic ties (your limit).	BIA TN 3C (TMS 402-22)
OK	Wall 1 (south, front)	Flashing and weeps at the base, 3 heads and the sills, under the parapet cap; end dams turned up 1 in.	IBC 2021 1404.4.2; BIA TN 7
OK	Wall 1 (south, front)	6 expansion joints (placed by the rules), panels up to 14'-8" (15 ft through the parapet max).	BIA TN 18A
OK	Wall 1 (south, front)	Opening sills and heads on course (3 courses = 8").	BIA TN 10
OK	Wall 1 (south, front)	3 lintels with 8" / 4" bearing (sizes per the structural drawings).	Per the structural drawings
OK	Wall 2 (east)	Ties at 16" x 16" (1.78 sq ft per tie, basic prescriptive limit 2.67); ties within 12 in. of openings and joints are counted; first row within 12" of the top, within 16 in. of shelf angles and lintels.	BIA TN 3C (TMS 402-22); IBC 2021 1404.6
OK	Wall 2 (east)	Air space 2", cavity 4".	BIA TN 3C (TMS 402-22); BIA TN 7
OK	Wall 2 (east)	pveneer 32 psf within the 40 psf for basic ties (your limit).	BIA TN 3C (TMS 402-22)
OK	Wall 2 (east)	Flashing and weeps at the base, 3 heads and the sills, under the parapet cap; end dams turned up 1 in.	IBC 2021 1404.4.2; BIA TN 7
OK	Wall 2 (east)	6 expansion joints (placed by the rules), panels up to 15'-0" (15 ft through the parapet max).	BIA TN 18A
OK	Wall 2 (east)	Opening sills and heads on course (3 courses = 8").	BIA TN 10
OK	Wall 2 (east)	3 lintels with 4" bearing (sizes per the structural drawings).	Per the structural drawings
OK	Wall 3 (north, service)	Ties at 16" x 16" (1.78 sq ft per tie, basic prescriptive limit 2.67); ties within 12 in. of openings and joints are counted; first row within 12" of the top, within 16 in. of shelf angles and lintels.	BIA TN 3C (TMS 402-22); IBC 2021 1404.6
OK	Wall 3 (north, service)	Air space 2", cavity 4".	BIA TN 3C (TMS 402-22); BIA TN 7
OK	Wall 3 (north, service)	pveneer 32 psf within the 40 psf for basic ties (your limit).	BIA TN 3C (TMS 402-22)
OK	Wall 3 (north, service)	Flashing and weeps at the base, 3 heads and the sills, under the parapet cap; end dams turned up 1 in.	IBC 2021 1404.4.2; BIA TN 7
OK	Wall 3 (north, service)	7 expansion joints (placed by the rules), panels up to 15'-0" (15 ft through the parapet max).	BIA TN 18A
OK	Wall 3 (north, service)	Opening sills and heads on course (3 courses = 8").	BIA TN 10
OK	Wall 3 (north, service)	3 lintels with 4" bearing (sizes per the structural drawings).	Per the structural drawings
OK	Wall 4 (west)	Ties at 16" x 16" (1.78 sq ft per tie, basic prescriptive limit 2.67); ties within 12 in. of openings and joints are counted; first row within 12" of the top, within 16 in. of shelf angles and lintels.	BIA TN 3C (TMS 402-22); IBC 2021 1404.6
OK	Wall 4 (west)	Air space 2", cavity 4".	BIA TN 3C (TMS 402-22); BIA TN 7
OK	Wall 4 (west)	pveneer 32 psf within the 40 psf for basic ties (your limit).	BIA TN 3C (TMS 402-22)
OK	Wall 4 (west)	Flashing and weeps at the base, under the parapet cap; end dams turned up 1 in.	IBC 2021 1404.4.2; BIA TN 7
OK	Wall 4 (west)	5 expansion joints (placed by the rules), panels up to 15'-0" (15 ft through the parapet max).	BIA TN 18A
OK	Weeps	Weeps at 24 in. o.c. above every flashing.	BIA TN 3C; BIA TN 7

GENERAL NOTES	
NO.	**NOTE**
1	Verify all dimensions, openings and floor lines in the field before ordering. Coursing as shown: report openings off course before laying.
2	Generic units and accessories at the contractor's entries: install per the makers' instructions and the project manual.
3	Mortar per ASTM C270 / TMS 602 (Type S as listed); grout per TMS 602 2.2; adhered veneer mortar Type N or S (IBC 2103.2.4).
4	Through-wall flashing with end dams and weeps at every base, head, sill and shelf angle (IBC 1404.4.2, BIA TN 7); weeps at 24 in. o.c.
5	Veneer ties at the spacing scheduled, within 12 in. of openings and movement joints and within 16 in. of supports (TMS 402-22 as summarized in BIA TN 3C).
6	Movement joints as shown (NCMA TEK 10-2C, BIA TN 18A): joint reinforcement stops at control joints; sealant and backer rod.
7	Reinforcing, bond beams, lintels and shelf angles as drawn, per the structural drawings: the quantities here count them, they do not design them.
8	Cold and hot weather construction and protection per TMS 602 (BIA TN 1).
9	These are checks and a layout, not an engineered design: the engineer, the building department and the project documents govern.

PREPARED BY

PROJECT

Sample Retail Building, CMU and brick

Client: Sample Development Group

NOTICE

CHECKS AND LAYOUT ONLY. NOT AN ENGINEERED DESIGN. Reinforcing, bond beams, lintels and shelf angles counted as drawn, per the structural drawings. The checks flag the code sections named; not a plan review.

REVISIONS

REV	DATE	DESCRIPTION
0	11/11/2026	Issued for review

DATE
11/11/2026

SCALE
NTS

DRAWN BY

SHEET SIZE
ANSI B (11" x 17")

SHEET TITLE
CHECKS AND NOTES

A4-10

SHEET 10 OF 10