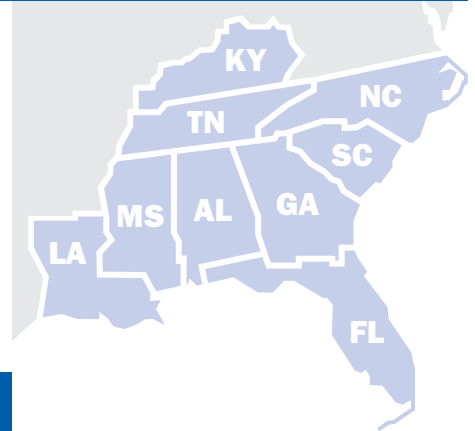


An
Independent
Study



2008-2009 COST COMPARISONS FOR COMMON COMMERCIAL WALL SYSTEMS

CAPITAL
BUILDING
CONSULTANTS

PROFESSIONAL
•
CONSTRUCTION
•
ESTIMATORS



Conducted
in **eleven**
cities in nine
states in the
Southeast
for the
Commercial
Construction
Industry

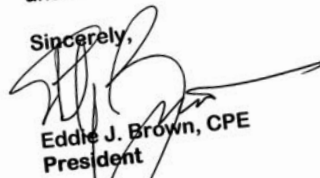
CAPITAL
BUILDING
CONSULTANTS



January 9, 2008

This is to advise that the cost information listed herein was obtained from the various regions indicated on the report and that they represent a medium cross section for labor and material. The cost model used for obtaining this information was considered as single to mid-rise commercial applications in excess of 10,000 SF floor area. The cost factors have been applied under the premise that the work indicated would be under a standard General Contract format.

Sincerely,



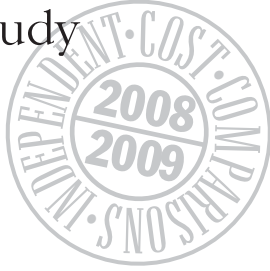
Eddie J. Brown, CPE
President



A Division of
E.J. Brown, Inc.

11040 OLD US HWY 52 • WINSTON-SALEM, NC 27107 • PHONE: 336.775.1904 • FAX: 336.775.1905
EMAIL: MAIL@CAPITALBUILDINGCONSULTANTS.COM • WWW.CAPITALBUILDINGCONSULTANTS.COM

Commercial Wall Cost Study



2008-2009 Wall Cost Study Methodology

Costs per square foot were developed for each wall system by identifying all material, labor, equipment and 10% mark up for general conditions required to represent a complete cost. The items were priced by conducting an intense survey of contractors in each of the regions for the material and labor costs involved in each wall system.

Work on the project was performed independently by Capital Building Consultants, a recognized authority on estimating in the Southeast.

The information attached includes a summary of the results of the study comparing costs per square foot for each wall system in each region, a description of each wall system and graphic details of each wall system. For consistent comparison, each wall quoted as 10' x 10', with no openings.

The costs developed are initial construction costs only and do not include maintenance or operating costs associated with the different wall systems. Although the actual costs may vary with location, time, and contractors, the comparative relationships between wall systems and geographic regions should remain approximately the same. For more detailed information about wall costs and this study, please call 800-622-7425.

Sample Calculation

Wall Type 1: Brick Veneer and Metal Stud

DESCRIPTION (10' HT X 10' WD)	QUANTITY	MATERIAL COST		LABOR COST		TOTAL
Modular Brick	733 ea	0.305	\$223.57	0.775	\$568.08	\$791.64
Sand	23.2 cf	1.03	23.90	—	0.00	23.90
Mortar	5.8 bg	7.50	43.50	—	0.00	43.50
Metal Ties	25 ea	0.073	1.83	0.027	0.68	2.50
Clean/Point Mortar	100 sf	0.062	6.20	0.24	24.00	30.20
15# Felt Paper	100 sf	0.04	4.00	0.03	3.00	7.00
Copper Flashing	10 lf	1.20	12.00	0.29	2.90	14.90
3 1/2" Batt Insulation	100 sf	0.445	44.50	0.18	18.00	62.50
1/2" W.R. Ext. Gyp. Sheathing	100 sf	0.38	38.00	0.25	25.00	63.00
18 Gauge Metal Stud	75 lf	0.93	69.75	0.455	34.13	103.88
Track for Studs	20 lf	0.82	16.40	0.38	7.60	24.00
5/8" Reg. Gyp.	100 sf	0.35	35.00	0.27	27.00	62.00
Tape and Bed Gyp.	100 sf	0.08	8.00	0.225	22.50	30.50
3 Coats Int. Paint	100 sf	0.265	26.50	0.435	43.50	70.00
4" Rubber Base	10 lf	0.99	9.90	0.40	4.00	13.90
Subtotal			\$563.04		\$780.38	\$1343.41
N.C. Sales Tax @ 7% of Material						39.41
W.C. & P.R. Tax @ 35% of Labor						273.13
Subtotal						\$1655.95
General Conditions @ 10%						165.60
Subtotal						\$1821.55
Overhead @ 5%						91.08
Subtotal						\$1912.63
Contractor's Fee @ 10%						191.26
Grand Total per 100 sf						\$2103.89
Square Foot Cost						\$21.04

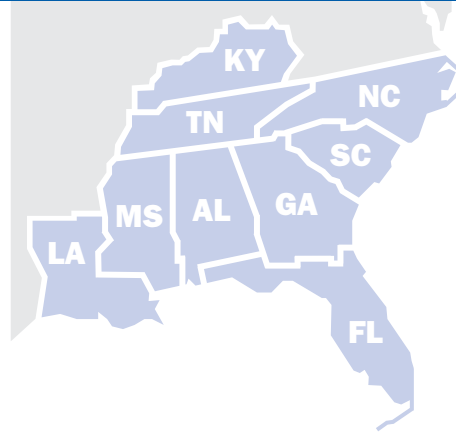
(Quantities and costs are presented in thousands except the Square Foot Cost)

Notes on interior finishes:

1. Walls with exposed interior block surface *are painted only.* (Walls No. 4,7,8,9,10,19,20)
2. Walls with exposed interior brick surface *are not finished.* (Walls No. 5,6)
3. Walls with stud backup *are finished with gypsum board and paint.* (Walls No. 1,2,3,11,12,15,16)
4. Walls with exposed metal and glass systems *are installed in finished condition.* (Walls No. 13,14)
5. Walls with exposed interior concrete surface and single height panels *are not finished or insulated.* (Walls No. 17,18)

Southeast Commercial Wall Costs

From 11 Cities
in 9 States



Wall Description	Avg. Per Sq. Ft. Selected Southeast Cities				
	BIRMINGHAM AL	JACKSONVILLE FL	ATLANTA GA	LOUISVILLE KY	NEW ORLEANS LA
1. Brick Veneer & Metal Stud	20.49	20.44	21.71	20.14	20.03
2. Brick Veneer & Wood Stud	20.06	20.00	21.24	19.67	19.70
3. Block Veneer & Metal Stud	18.60	18.55	19.51	17.88	18.49
4. Brick & Block Barrier Wall	28.43	28.59	30.99	27.80	27.97
5. Utility Brick [Masonry Bonded]	20.81	20.55	23.97	20.54	20.78
6. Utility Brick [Joint Reinforcing]	20.48	20.22	23.58	20.21	20.45
7. 12" Split Face Block	18.98	18.49	20.35	18.17	18.52
8. Utility Brick & Block Cavity Wall	23.75	23.97	26.47	23.35	23.58
9. Block & Block Cavity Wall	26.45	26.62	28.23	25.47	26.29
10. Stucco on CMU	23.46	23.85	24.90	22.97	23.09
11. Hardcoat Simulated Stucco	14.14	14.34	14.78	13.92	13.78
12. Industrial Ribbed Metal Siding	16.65	16.50	17.12	16.33	16.27
13. Metal Curtain Wall	38.52	38.24	39.27	37.41	38.80
14. Glass Curtain Wall	52.90	52.42	52.88	51.41	51.78
15. Granite or Marble Panel	66.96	72.02	71.79	68.64	73.38
16. Hollow Structural Brick	20.43	20.36	21.96	19.85	20.16
17. Pre-Cast Concrete Tilt-Up Panels	16.07	15.75	16.73	15.41	15.89
18. Pre-Cast Concrete Tilt-Up Fluted Panels	17.00	16.60	17.82	16.33	16.99
19. 8" Split Face [Colored]	17.88	17.75	18.96	16.92	17.79
20. Ground Face Block	24.16	24.53	24.96	23.09	23.72

Note: The individual per square foot unit cost represents an "over the counter" median cost; thus, the unit cost could move 25% in either direction depending on circumstances. Likewise, we have not considered discounts or any isolated economic factors which might affect individual unit cost.

An Independent
Study prepared
in 2008



Average Wall Cost
Per Square Foot
for each
Designated
City/Area
& State

CAPITAL
BUILDING
CONSULTANTS

Wall Description	Avg. Per Sq. Ft. Selected Southeast Cities					
	JACKSON MS	CHARLOTTE NC	TRIANGLE NC	CHARLESTON SC	GREENVILLE SC	NASHVILLE TN
1. Brick Veneer & Metal Stud	19.87	21.04	20.58	19.52	19.88	20.20
2. Brick Veneer & Wood Stud	19.36	20.62	20.09	18.98	19.34	19.74
3. Block Veneer & Metal Stud	17.77	18.89	18.62	17.69	17.94	18.48
4. Brick & Block Barrier Wall	27.02	29.34	28.90	26.98	27.58	28.15
5. Utility Brick [Masonry Bonded]	20.49	21.84	21.28	19.97	20.51	20.85
6. Utility Brick [Joint Reinforcing]	20.26	21.50	20.94	19.65	20.18	20.52
7. 12" Split Face Block	17.67	18.88	18.64	17.61	18.15	18.41
8. Utility Brick & Block Cavity Wall	22.70	24.76	24.37	22.75	23.26	23.76
9. Block & Block Cavity Wall	24.84	27.16	26.81	25.11	25.57	26.30
10. Stucco on CMU	22.40	23.88	24.48	22.69	22.74	23.39
11. Hardcoat Simulated Stucco	13.75	14.94	14.72	13.72	13.77	13.95
12. Industrial Ribbed Metal Siding	16.12	17.52	17.27	16.32	16.19	16.65
13. Metal Curtain Wall	36.88	38.92	38.82	38.17	38.32	38.77
14. Glass Curtain Wall	50.45	52.86	52.61	51.24	51.14	52.26
15. Granite or Marble Panel	69.61	72.41	71.56	65.03	67.76	69.70
16. Hollow Structural Brick	19.75	20.84	20.73	19.60	19.69	20.11
17. Pre-Cast Concrete Tilt-Up Panels	15.02	15.96	15.98	15.40	15.27	15.92
18. Pre-Cast Concrete Tilt-Up Fluted Panels	15.94	16.97	17.21	16.39	16.69	16.85
19. 8" Split Face [Colored]	16.69	18.00	17.65	16.66	16.89	17.78
20. Ground Face Block	22.53	24.42	24.37	23.24	23.45	23.58

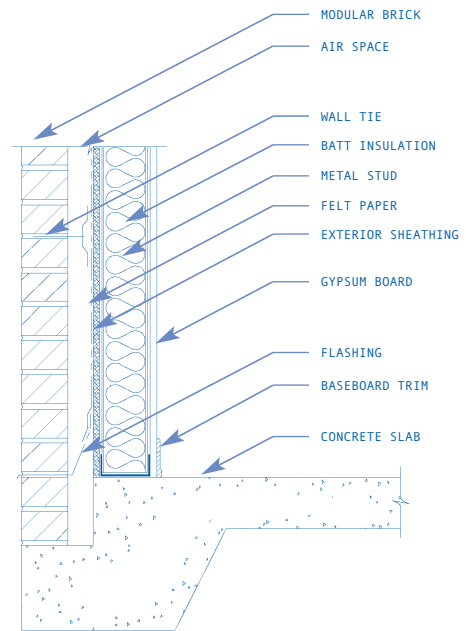
Note: The individual per square foot unit cost represents an "over the counter" median cost; thus, the unit cost could move 25% in either direction depending on circumstances. Likewise, we have not considered discounts or any isolated economic factors which might affect individual unit cost.

Comparison Details

& Sections of
Commercial
Wall Types



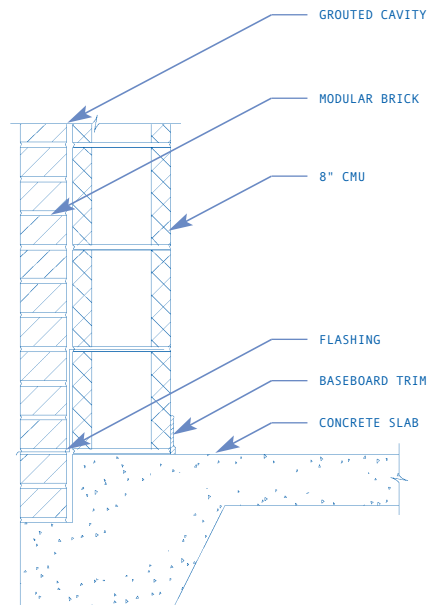
Wall No.1



Brick Veneer and Metal Stud

Standard modular brick facade, 2" air space, 15# felt paper, 1/2" exterior sheathing, metal stud backup, batt insulation, metal ties, flashing, 5/8" interior gypsum board, 3 coats interior paint.

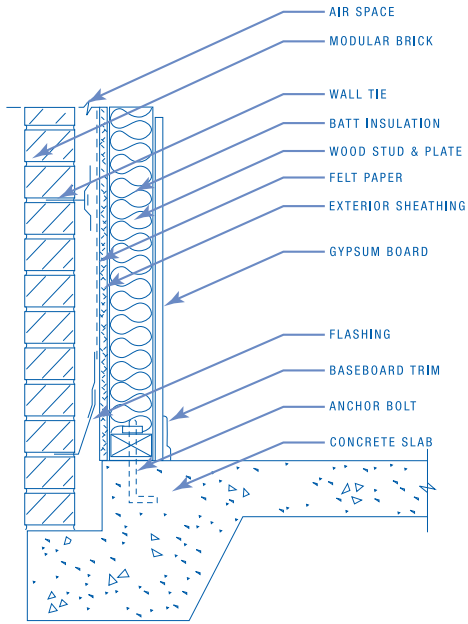
Wall No.4



Brick and Block Barrier Wall

Standard modular brick facade, grouted cavity, 8" CMU backup, 3 coats interior paint.

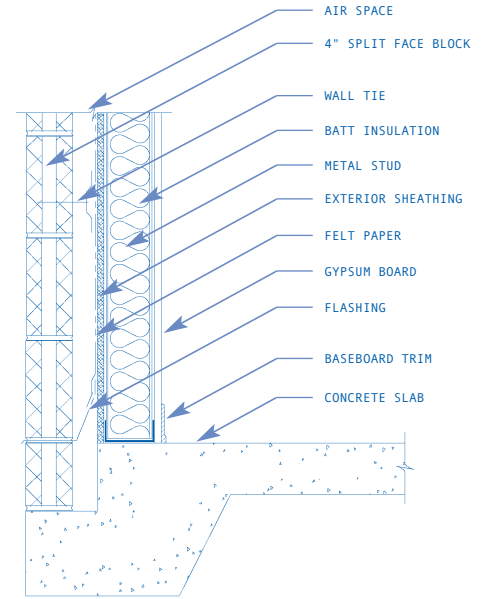
Wall No.2



Brick Veneer and Wood Stud

Standard modular brick facade, 2" air space, 15# felt paper, 1/2" exterior sheathing, 2"x4" studs & top plate, 2"x4" P.T. bottom plate, batt insulation, metal ties, flashing, 5/8" interior gypsum, 3 coats interior paint.

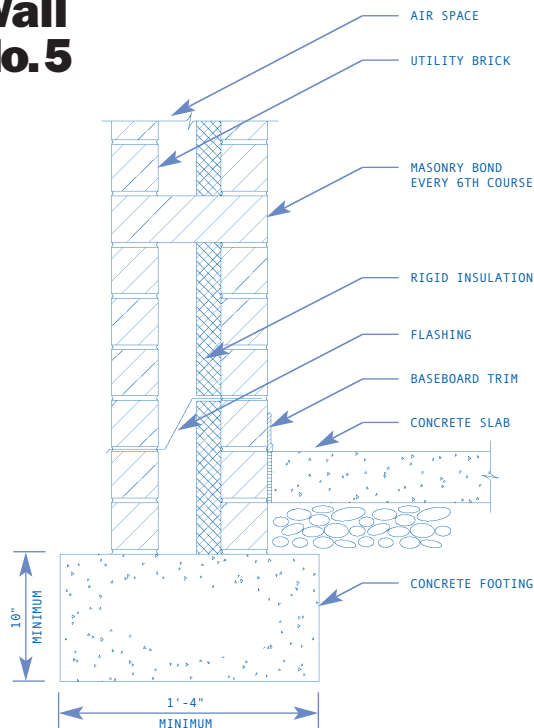
Wall No.3



Block Veneer and Metal Stud

4" split face block facade, water repellent, 2" air space, 15# felt paper, 1/2" exterior sheathing, metal stud backup, batt insulation, metal ties, flashing, 5/8" interior gypsum board, 3 coats interior paint.

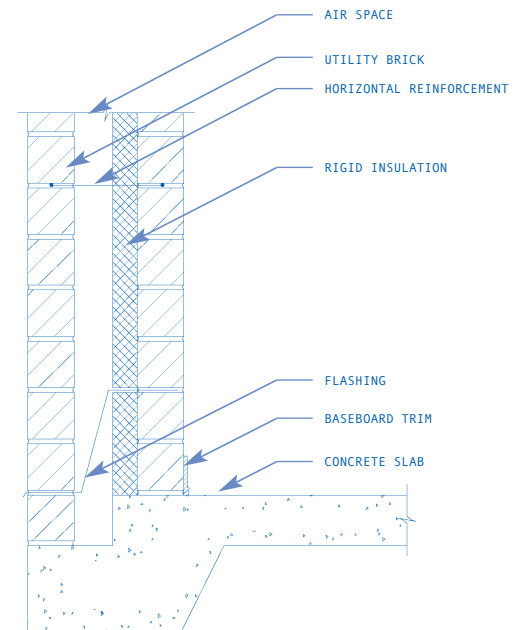
Wall No.5



Utility Brick (Masonry Bonded) Wall

Utility brick facade, utility brick backup, 4" air space, 2" rigid insulation, flashing.

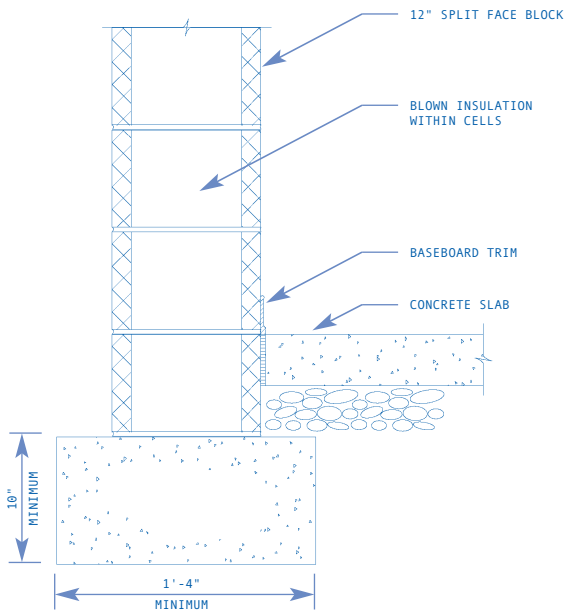
Wall No.6



Utility Brick (Horizontal Joint Reinforcing) Wall

Utility Brick facade, utility brick backup, 4" air space, 2" Rigid Insulation, Horizontal joint reinforcing, flashing.

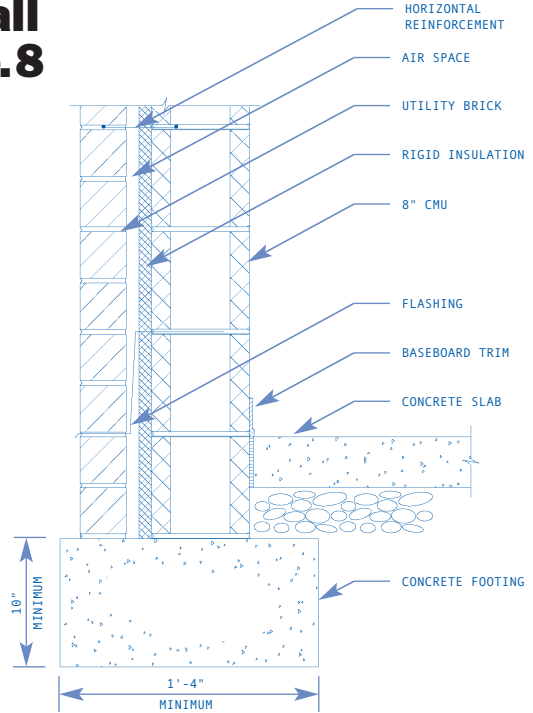
Wall No.7



12" Split Face Block Wall

12" split face block, blown insulation, water repellent, 3 coats interior paint.

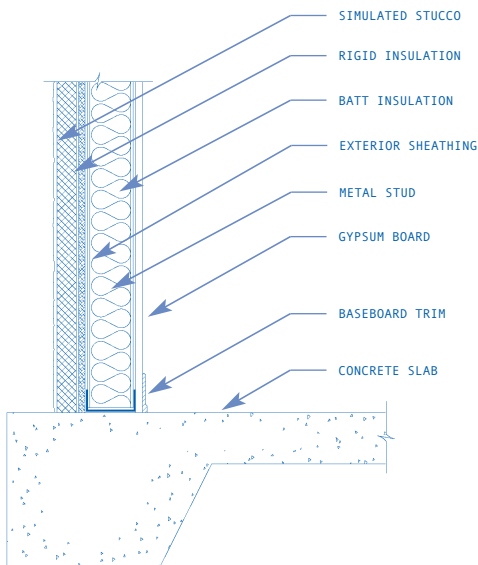
Wall No.8



Brick and Block Cavity Wall

Utility brick facade, 2" air space, 8" CMU backup, 1" rigid insulation, horizontal joint reinforcing, flashing, dampproofing, 3 coats interior paint.

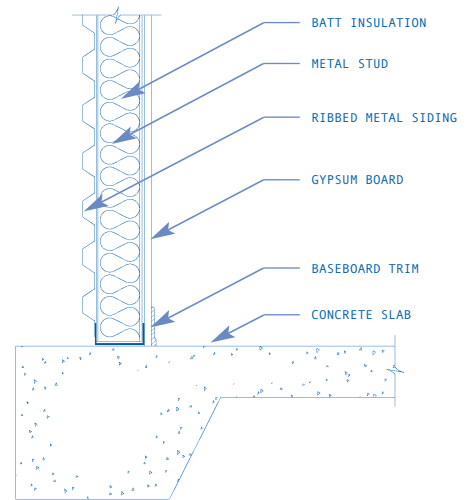
Wall No.11



Hardcoat Simulated Stucco Wall

Hardcoat simulated stucco facade, 1/2" exterior sheathing, 1" rigid insulation, 18 gauge metal stud backup, batt insulation, 5/8" interior gypsum board, 3 coats interior paint.

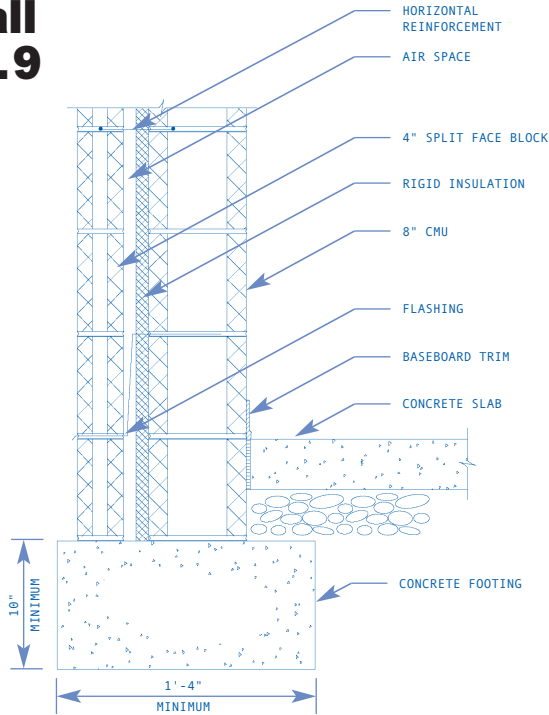
Wall No.12



Industrial Ribbed Metal Siding Wall

26 gauge ribbed industrial metal siding facade, 16 gauge metal studs, 5/8" interior gypsum board, batt insulation, 3 coats interior paint.

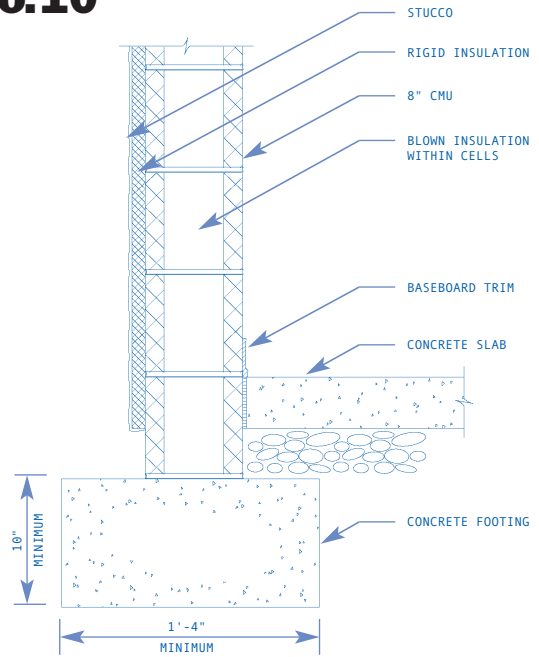
Wall No.9



Block and Block Cavity Wall

4" split face block facade, 2" air space, 8" CMU backup, 1" rigid insulation, horizontal joint reinforcing, flashing, water repellent, dampproofing, 3 coats interior paint.

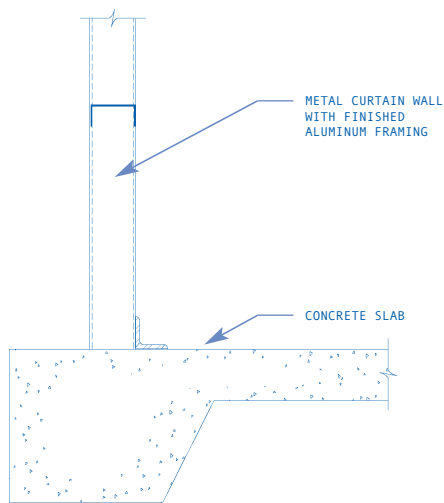
Wall No.10



Stucco on CMU Wall

Exterior stucco facade, 8" CMU backup, blown insulation, 1" rigid insulation, 3 coats interior paint.

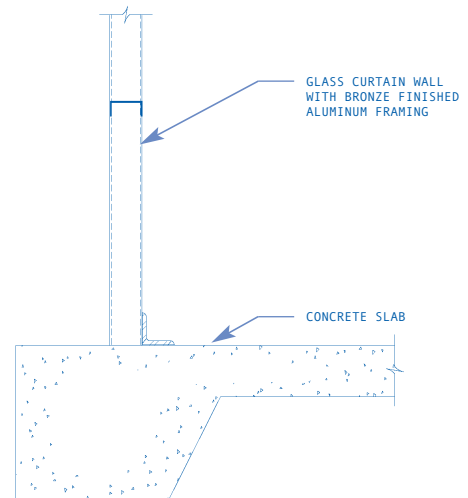
Wall No.13



Metal Curtain Wall

Aluminum framing, 70% double insulating glass, 30% insulated enameled metal panel.

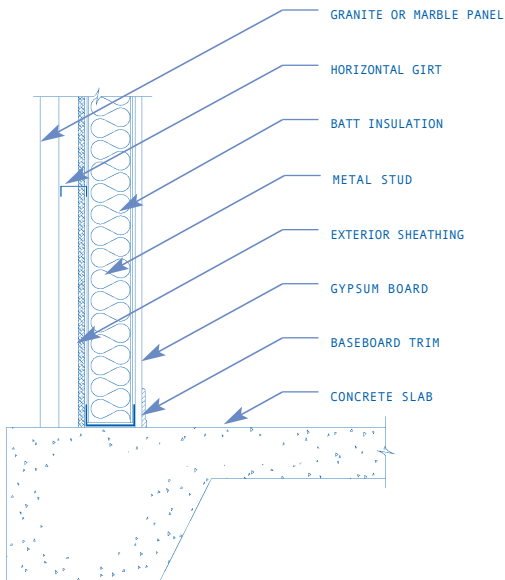
Wall No.14



Glass Curtain Wall

Bronze finished aluminum framing, 70% insulating glass, 30% insulating spandrel glass.

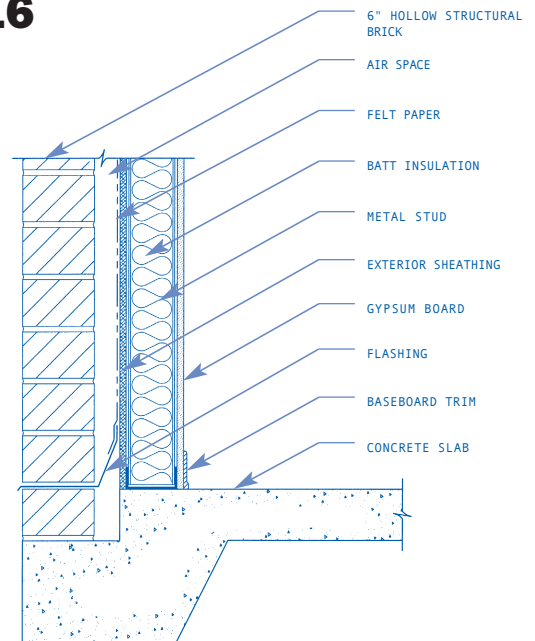
Wall No.15



Granite or Marble Panel Wall

1½" to 2" granite or marble panel facade, ½" exterior sheathing, 16 gauge metal stud backup, batt insulation, ⅝" interior gypsum board, 3 coats interior paint.

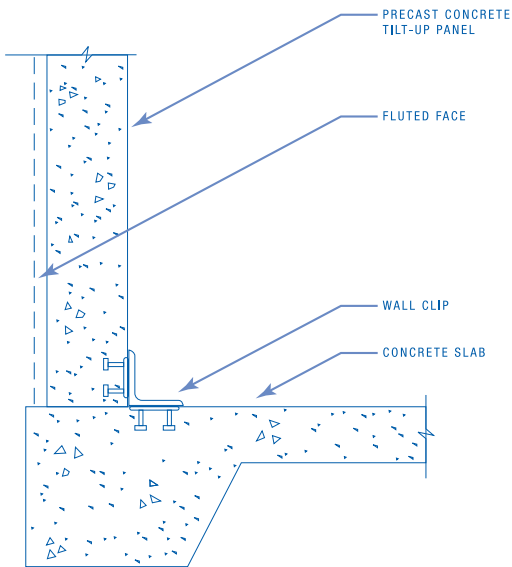
Wall No.16



Hollow Structural Brick

6" hollow structural brick, 2" air space, 15# felt paper, ½" exterior sheathing, metal stud backup, batt insulation, flashing, ⅝" interior gypsum board, 3 coats interior paint.

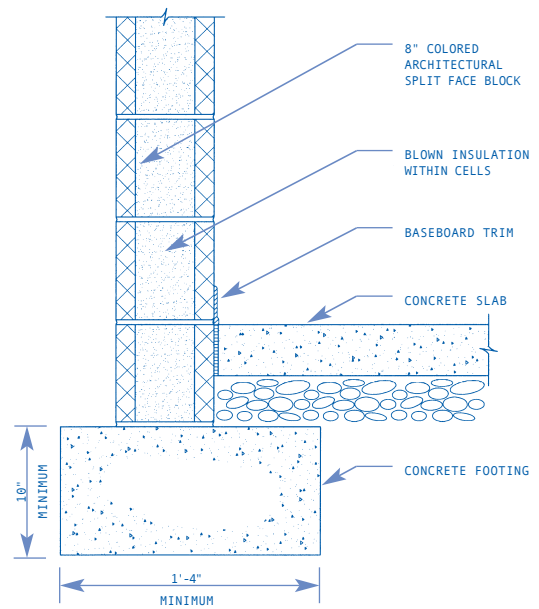
Wall No.18



Pre-Cast Concrete Tilt-Up Fluted Panel Wall

6" tilt-up concrete panel with "fluted finish" face.

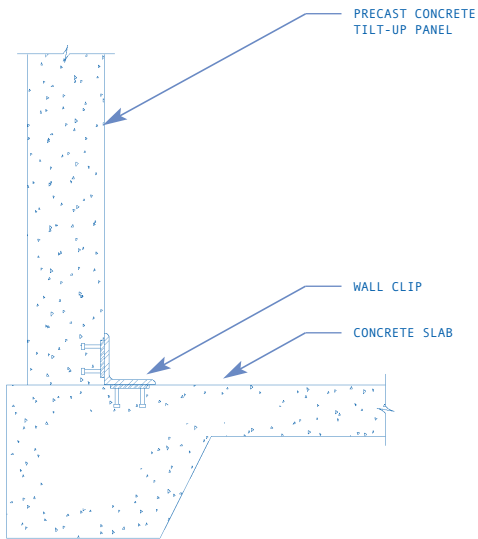
Wall No.19



8" Split Face [Colored]

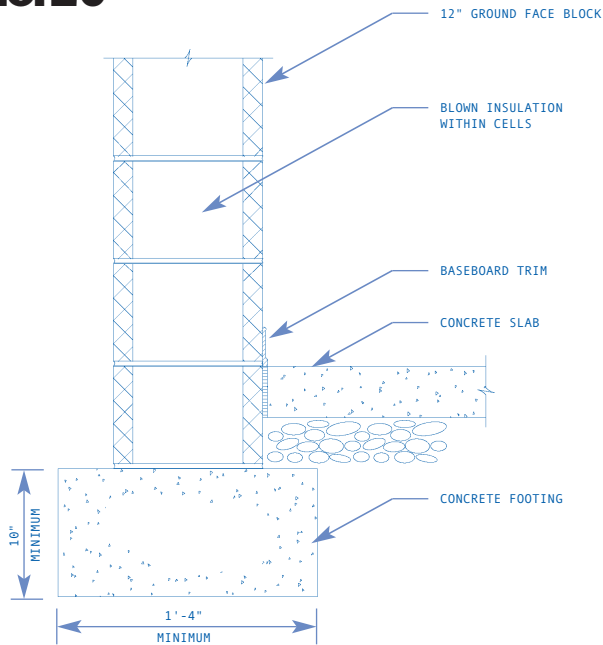
8" colored architectural split face block [colored mortar], blown insulation, water repellant, 3 coats interior paint.

Wall No.17



Pre-Cast Concrete Tilt-Up Panel Wall
6" tilt-up concrete panel facade.

Wall No.20



12" Ground Face Block Wall
12" ground face block, blown insulation, water repellent, 3 coats interior paint.

Brick Industry
Southeast Region
commissioned
Capital Building
Consultants to
conduct this study
to develop comparative
costs of the common
wall systems used in
commercial construction
in the Southeast.



An Independent Study

Conducted
in **eleven**
cities in nine
states in the
Southeast
for the
Commercial
Construction
Industry



*PROFESSIONAL
CONSTRUCTION
ESTIMATORS*

