SERIES 9 EPS/CONCRETE COMPOSITE WALL PANEL SYSTEM

MAXIMUM DESIGN LOAD RATING = ±55.0 PSF

MAX. SHEAR PARALLEL TO WALL PANEL	
WALL HEIGHT	SHEAR IN Lbs PER LINEAR FT.
8 FT.	84
9 FT.	75
10 FT.	67

MAX. AXIAL COMPRESSION AND TENSION		
STUD SPACING	COMPRESSION IN Lbs PER LINEAR FT.	TENSION IN Lbs PER LINEAR FT.
8 IN.	4320	6388
9-1/2 IN.	3600	5324
12 IN.	2880	4259

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2006 INTERNATIONAL RESIDENTIAL CODE (IRC) AND 2006 INTERNATIONAL BUILDING CODE (IBC) WITH TEXAS REVISIONS.
TESTING PERFORMED IN ACCORDANCE WITH FLORIDA PROTOCOLS TAS201, 202 & 203.

ALL ELECTRICAL, MECHANICAL DETAILS AND FIRE RATING PROVISIONS ARE NOT PART OF THIS APPROVAL AND SHALL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER AND REVIEWD BY CORRESPONDING BUILDING DEPARTMENT.

HERCUWALL COMPOSITE WALL SYSTEM IS DESIGNED AND TO BE INSTALLED AS AN EXTERIOR OR INTERIOR BEARING OR NON BEARING WALL.

THIS APPROVAL IS FOR THE WALL PANELS AS SHOWN ON THESE DRAWINGS. BUILDING DIMENSIONS, DETAILS, UPLIFT, FOUNDATIONS, ROOF AND OTHER ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER AND REVIEWED BY THE STRUCTURAL PLANS EXAMINAR OF THE CORRESPONDING BUILDING DEPARTMENT.

DISSIMILAR MATERIALS IN CONTACT WITH EACH OTHER SHALL BE PROTECTED IN ACCORDANCE WITH APPLICABLE BUILDING CODE.

DESIGN IS BASED ON TESTING IN ACCORDANCE WITH FLORIDA BUILDING CODE
LARGE MISSILE IMPACT TEST, TAS 201-94.
CYCLIC WIND PRESSURE TEST, TAS 203-94.
STATIC AIR PRESSURE TEST, TAS 202.
AIR INFILTRATION TEST, ASTM E283-04
WATER INFILTRATION TEST, ASTM E331-00

HERCUWALL COMPOSITE PANELS HAVE BEEN TESTED WITH INTERIOR 1/2" THK. GYPSUM BOARDS ATTACHED TO SHEAR STRIPS WITH #6 X 1-1/4" S.M.S. AT 12" O.C. VERTICALLY.

THIS APPROVAL DOCUMENT IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT.

STATE OF TEXAS
JAVAD AHMAD
TEXAS PE # 106516
JAVAD AHMAD
106516
OCT 16 2014

COMPONENTS SPECIFICATIONS

CONCRETE

READY-MIXED CONCRETE FOR WALL PANELS SHALL MEET ALL REQUIREMENTS OF ACI 301, CEMENT,
U.N.O. MINIMUM STRENGTH AT 28 DAYS SHALL BE 3000 PSI.,
MAXIMUM AGGREGATE SIZE IS 3/8" OR ROCK MIX.

HYDRAULIC GROUT PUMP WITH A 3" OR SMALLER DISCHARGE REDUCED TO 2" OR 1-1/2" HOSE AT DELIVERY POINT.

REBAR REINFORCEMENT

USE ASTM A615 GRADE 60 FOR REINFORCEMENT.

LAP SPLICES TO BE A MINIMUM OF 48 BAR DIAMETERS.

VERTICAL REBAR IS NOT REQUIRED WITH WALL PANELS AS VERTICAL REINFORCING IS INTEGRAL TO THE SYSTEM (SHEAR STRIP).
TWO CONTINUOUS HORIZONTAL REBAR REINFORCEMENTS SHALL BE PLACED WITHIN THE BOND BEAM AT TOP OF THE WALL WITHIN INTEGRAL PLASTIC HANGERS.
BAR DIAMETERS SHALL BE MINIMUM 1/2"(#4) OR HIGHER AS SPECIFIED BY THE ENGINEER OF RECORD.

SHEET METAL COMPONENTS

ALL SHEET METAL COMPONENTS INCLUDING SHEAR STRIP, TOP CAP, BASE TRACK, HEADER TRIM, WINDOW AND DOOR TRIM EXTERIOR AND INTERIOR SILL COVER SHALL BE MANUFACTURED FROM 24 GA. GALVANIZED COLD ROLLED STEEL.

GALVANIZED COATING SHALL BE A MINIMUM OF G-90 PER ASTM A653.

STEEL USED IN THE MANUFACTURE OF SHEAR STRIPS IS SPECIFIED AT 50 KIPS YIELD STRENGTH, PER AISI 1010, ASTM A 109.
STEEL USED IN ALL OTHER SHEET METAL COMPONENTS SHALL HAVE A MINIMUM YIELD STRENGTH OF 33 KIPS.

OUTER PANEL SKIN COATED WITH LATEX PRIMER AND SEALER.

DIAMOND MESH (FOR STUCCO FINISH)

DIAMOND MESH SHALL BE OF THE 'V' GROOVE 'SELF FURRING' LATH VARIETY. TYPE 2.5 LBS (PER SQ. YD.), GALVANIZED PER TABLE 3, NOTATION 'C' ASTM C1063-08.

SELF-FURRING DIAMOND MESH SHALL BE INSTALLED HORIZONTALLY AND ATTACHED TO SHEAR STRIPS WITH #8 X 1/2" SELF DRILLING SCREWS AT 6" O.C. VERTICALLY AND OVERLAPPED A MINIMUM OF 2 IN.

IMPACT TAPE (OPTIONAL TO DIAMOND MESH)

DECKER BRAND 43 OR EQUAL.
9 MIL POLYETHYLENE BACKING WITH A SYNTHETIC RUBBER ADHESIVE
8" WIDE TAPE APPLIED IN BETWEEN CONCRETE STUDS ON THE EXTERIOR OF THE WALL.
4" WIDE TAPE APPLIED OVER THE VERTICAL AND HORIZONTAL WIND SHEAR STRIPS ON THE EXTERIOR OF WALL.

SCREWS

ALL SCREWS CONNECTING SHEET METAL COMPONENTS SHALL BE ZINC PLATED OR GALVANIZED STEEL, #8 DIAMETER MIN. 1/2" LENGTH, SELF DRILLING TAPPING AND SHALL CONFORM TO SAE J 78 OR EQUAL.

SCREWS FOR STEEL-TO-STEEL CONNECTIONS SHALL BE INSTALLED WITH A MIN. EDGE DISTANCE AND CENTER-TO-CENTER SPACING OF 1/2", SHALL BE SELF DRILLING TAPPING AND SHALL CONFORM TO SAE J 78.

FOAM

FOAM FOR WALL PANELS IS MANUFACTURED FROM EXPANDED POLYSTYRENE (EPS) AND SHALL HAVE
MINIMUM DENSITY = 1.03 PCF
MAX. FLAME SPREAD RATING = 10 AS PER ASTM E-84
SMOKE DEVELOPED INDEX = 130
SPONTANEOUS IGNITION TEMPERATURE = 752° F.

CAULK

CONTINUOUS 1/8" BEAD OF CAULK APPLIED ON ALL JOINTS BETWEEN PANEL FORMS FROM T.O.W. TO BASE.

CAULK SHALL BE SILICONE VARIETY WITH A 100 YEAR WARRANTY.

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

WALL-PANELS\14-01HI

EPS/CONCRETE COMPOSITE WALL SYSTEM

HERCUWALL INC.
1720 W. 10TH ST, SUITE 101
TEMPE, AZ. 85281
TEL. (800) 289-3139 FAX. (480) 284-6535

revisions:

no	date	by	description

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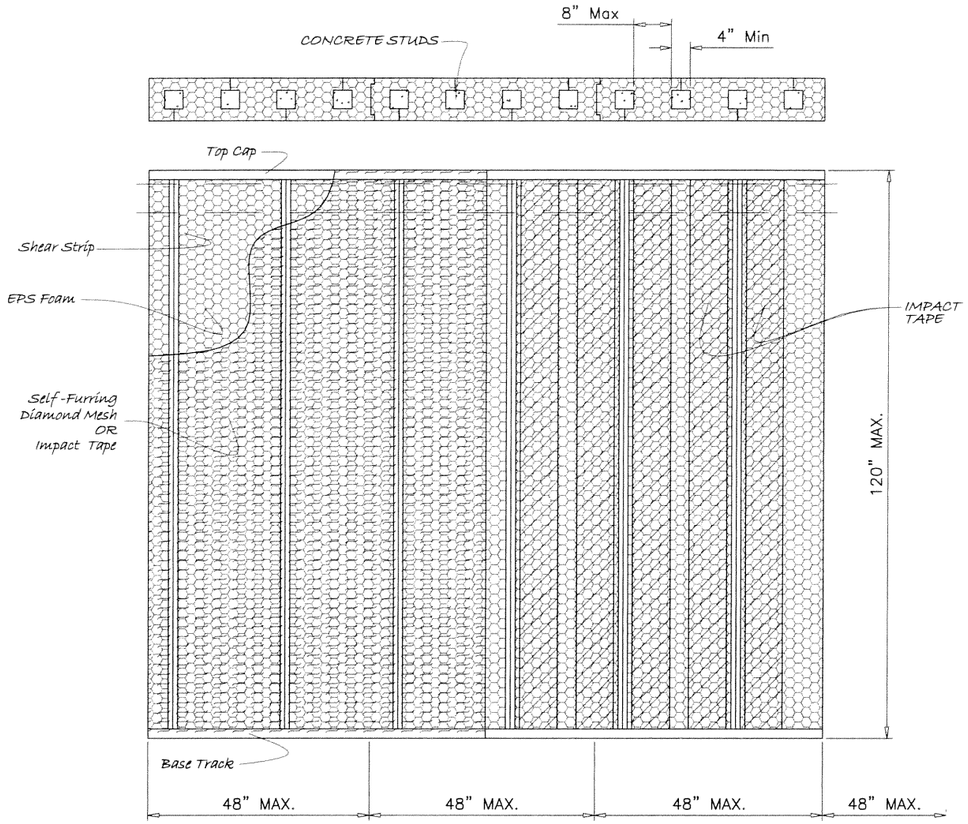
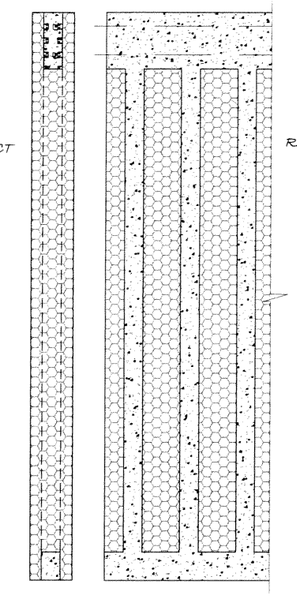
scale: -
dr. by: HAMID
chk. by:

drawing no.
14-01

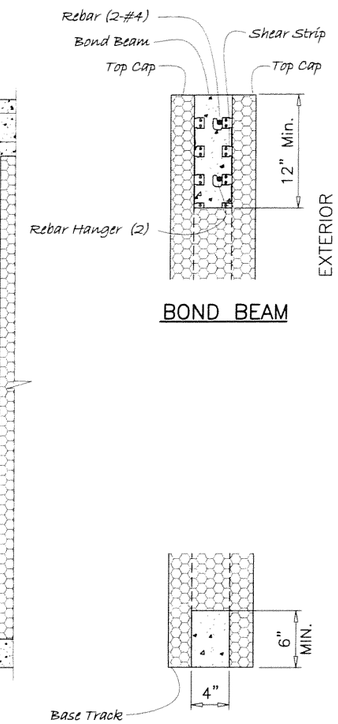


WALL EXTERIOR ELEVATION WITHOUT OPNGS.

3/8" = 1'-0"

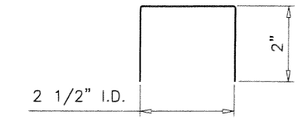


CONC. STUDS

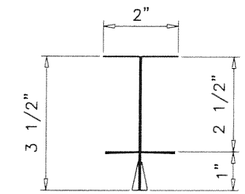


BOND BEAM

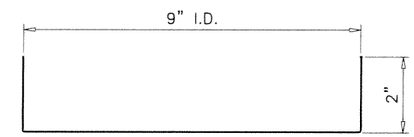
BASE BEAM



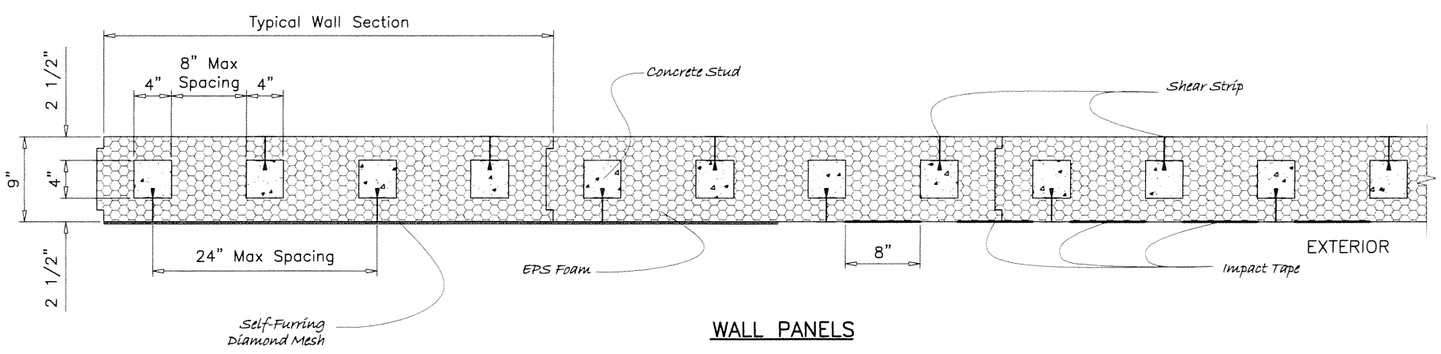
Top Cap
24 Gauge G90 Galvanized Steel



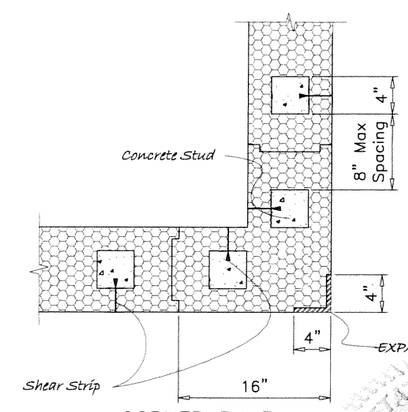
Shear Strip
24 Gauge G90 Galvanized Steel



Base Track
24 Gauge G90 Galvanized Steel



WALL PANELS



CORNER PANEL

STATE OF TEXAS
JAVAD AHMAD
TEXAS PE # 106516
OCT 16 2014

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
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WALL-PANELS\14-01HI

EPS/CONCRETE COMPOSITE WALL SYSTEM

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dr. by: HAMID
chk. by:

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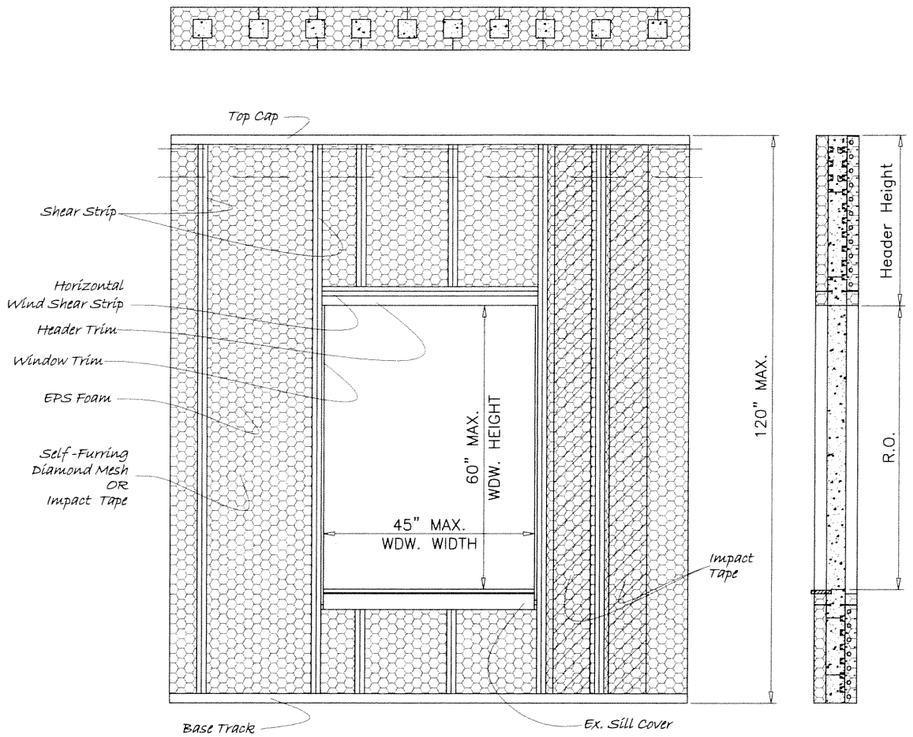
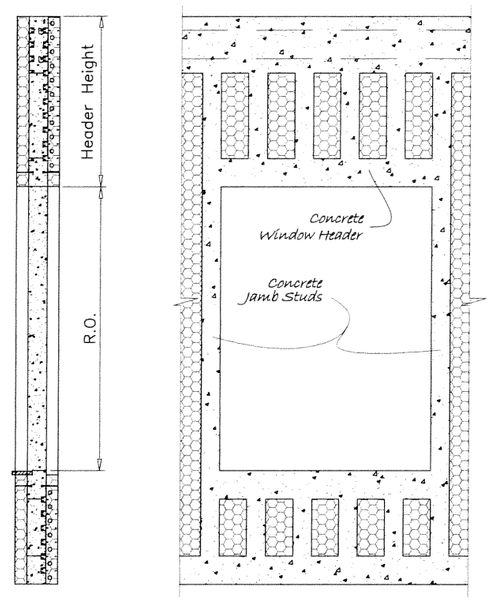
sheet 2 of 8



WALL EXTERIOR ELEVATION WITH WDW. OPNG.

3/8" = 1'-0"



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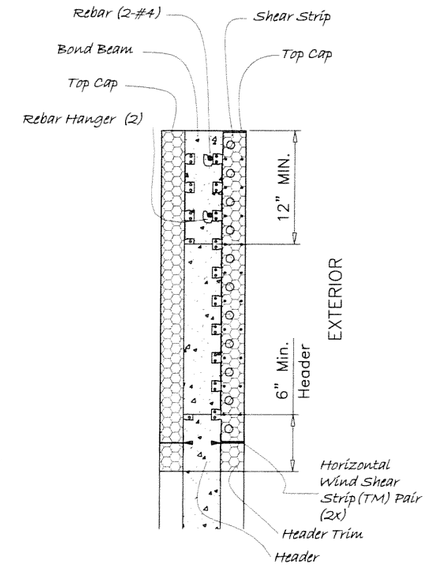
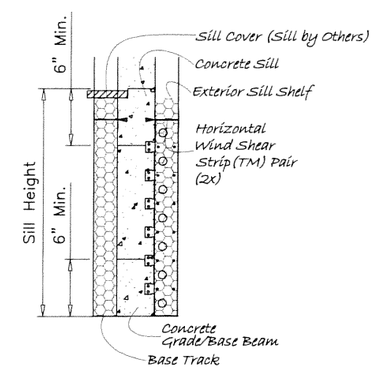


OPENING HEADER



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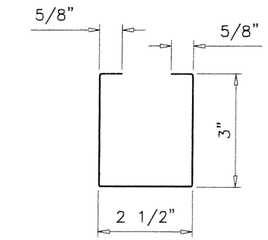
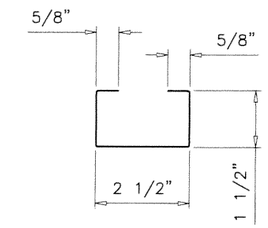
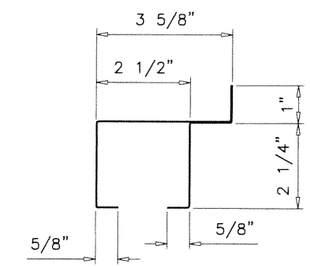


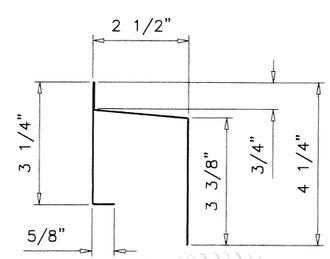
Window/Door Header
24 Gauge G90 Galvanized Steel



Window/Door Trim
24 Gauge G90 Galvanized Steel



Inner Window Sill
24 Gauge G90 Galvanized Steel



Outer Window Sill
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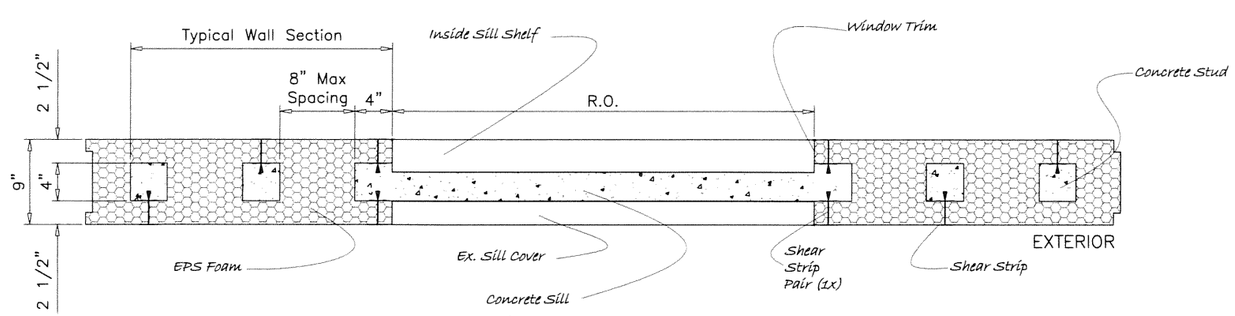

WINDOW OPENING

SINGLE JAMB STUD

JAVAD AHMAD
TEXAS PE # 106516

OCT 16 2014

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

WALL-PANELS\14-01HI

EPS/CONCRETE COMPOSITE WALL SYSTEM

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chk. by:

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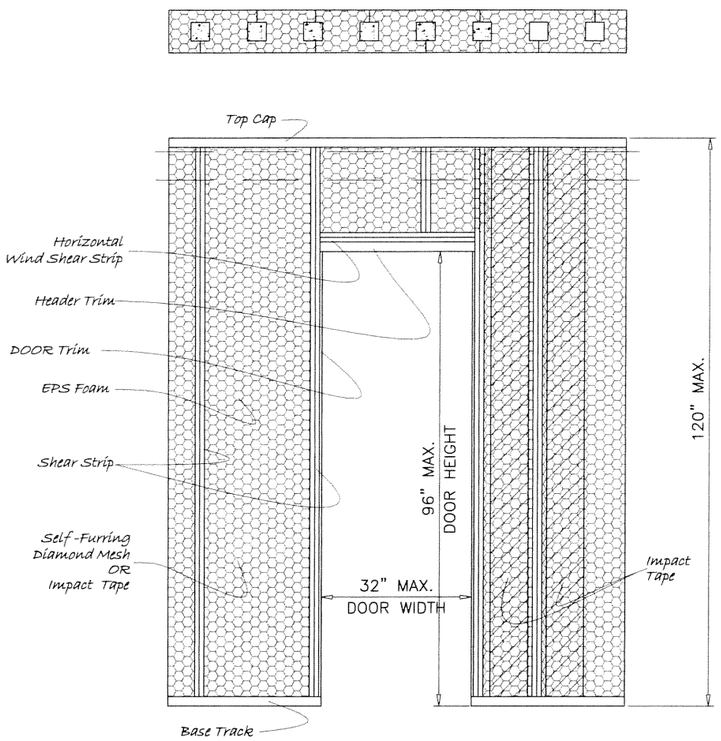
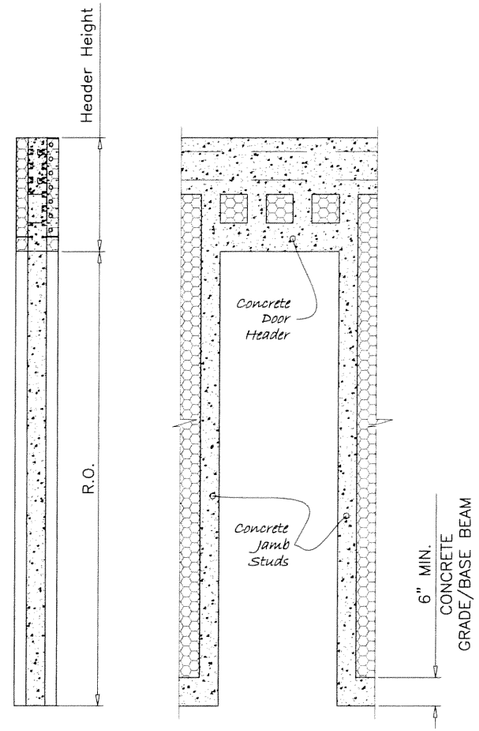
sheet 3 of 8

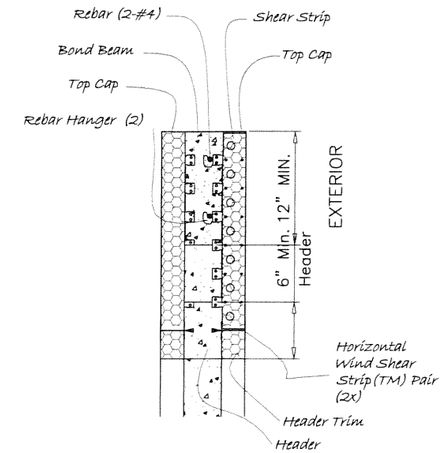


WALL EXTERIOR ELEVATION WITH DOOR OPNG.

3/8" = 1'-0"



CONC. STUDS



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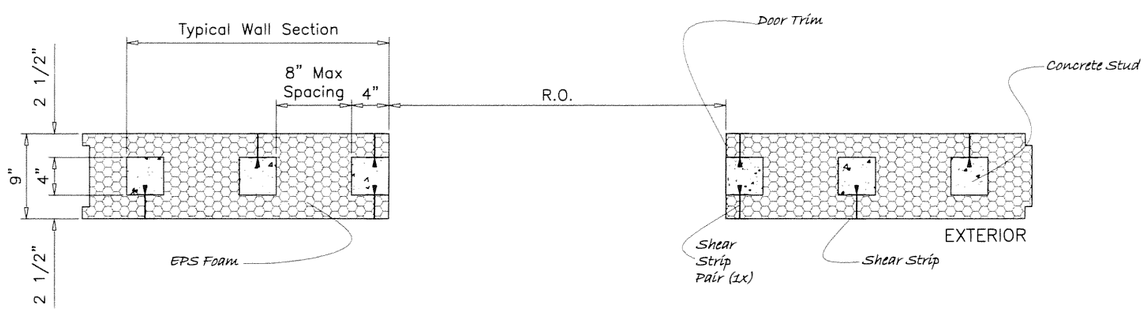

DOOR OPENING

SINGLE JAMB STUD

JAVAD AHMAD
TEXAS PE # 106516

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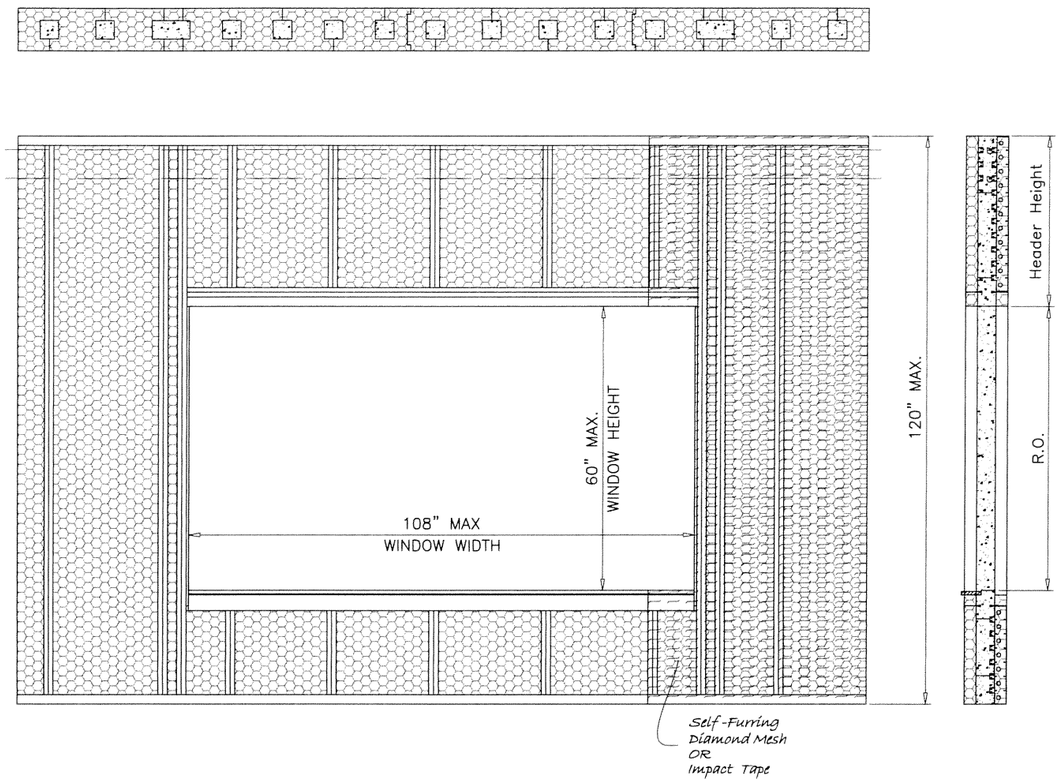
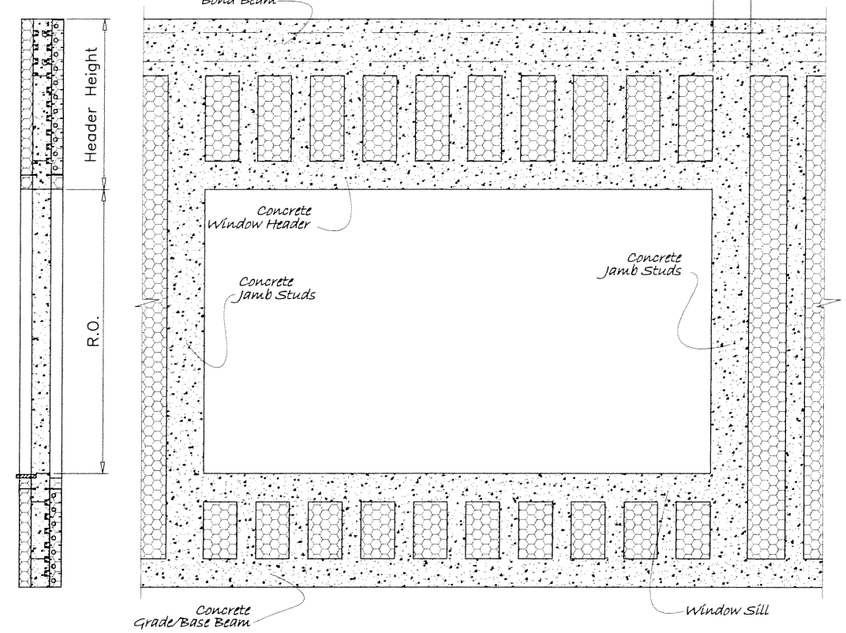


WALL EXTERIOR ELEVATION WITH WDW. OPNG.

3/8" = 1'-0"



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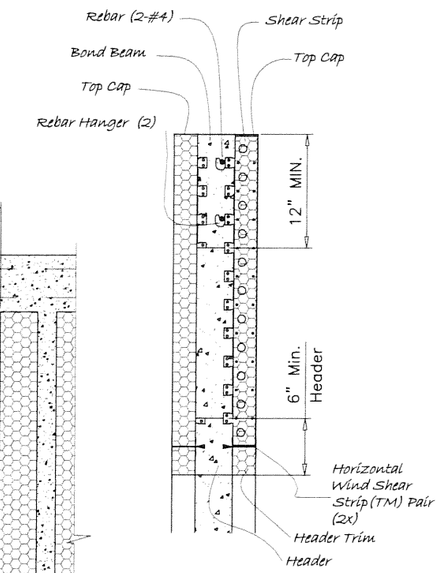

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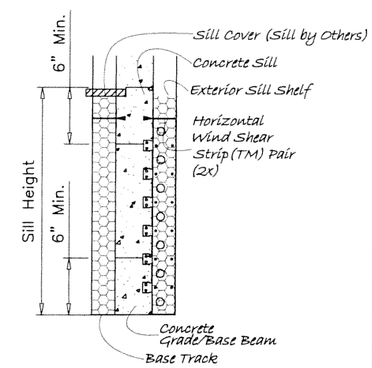

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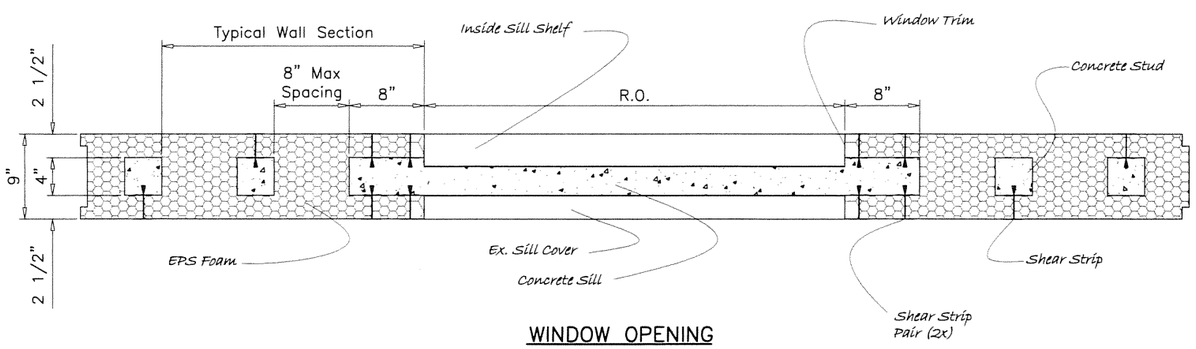

WINDOW OPENING

DOUBLE JAMB STUD

STATE OF TEXAS
JAVAD AHMAD
TEXAS P.E. #. 106515
OCT 16 2014

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
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WALL-PANELS\14-01HI

EPS/CONCRETE COMPOSITE WALL SYSTEM

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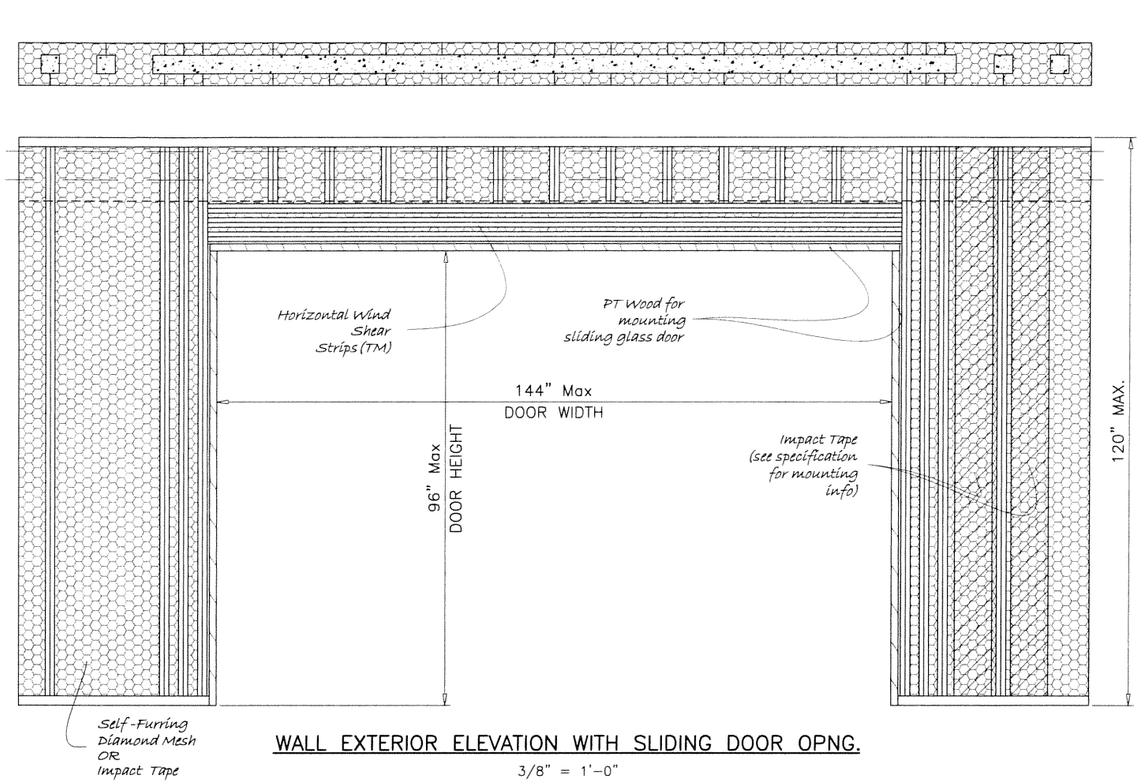
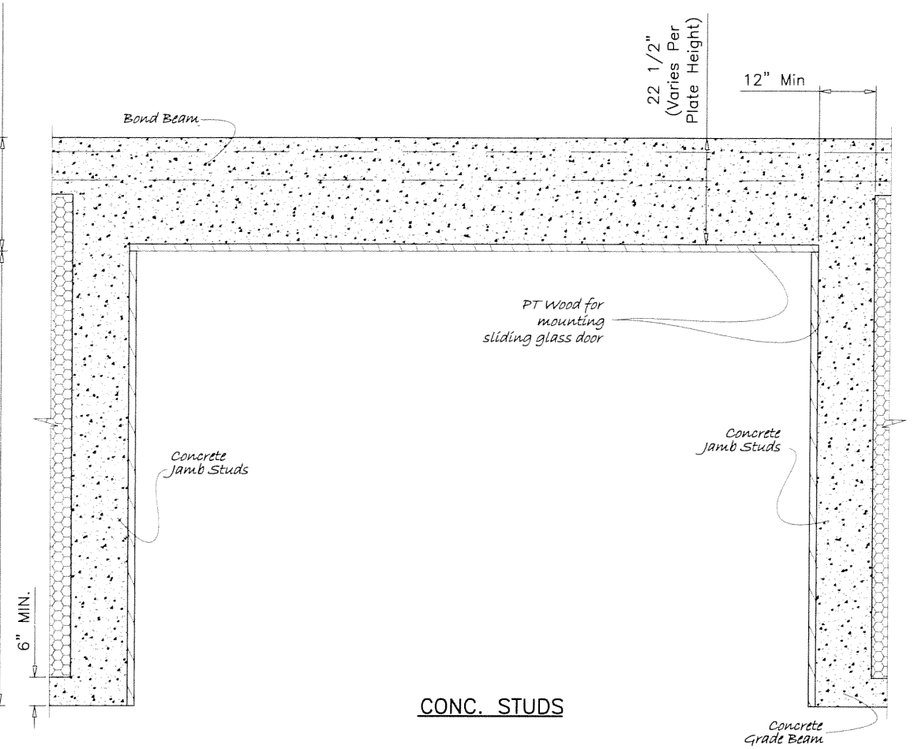
sheet 5 of 8



WALL EXTERIOR ELEVATION WITH SLIDING DOOR OPNG.

3/8" = 1'-0"



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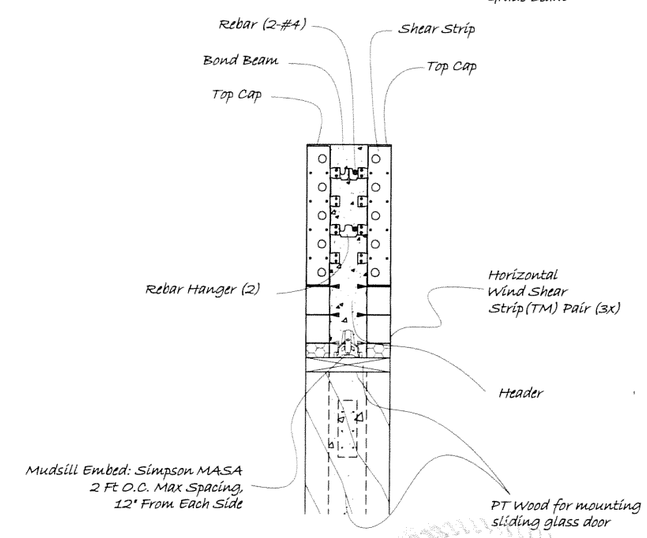

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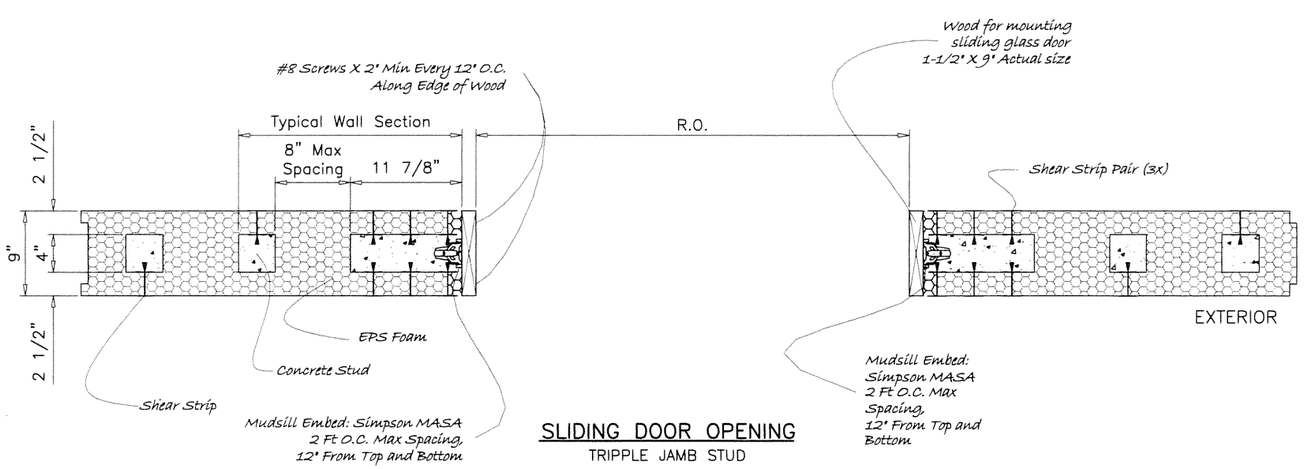

SLIDING DOOR OPENING

TRIPPLE JAMB STUD

JAVAD AHMAD
TEXAS PE # 106516

STATE OF TEXAS
JAVAD AHMAD
106516
OCT 16 2014
PROFESSIONAL ENGINEER

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
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WALL-PANELS\14-01HI

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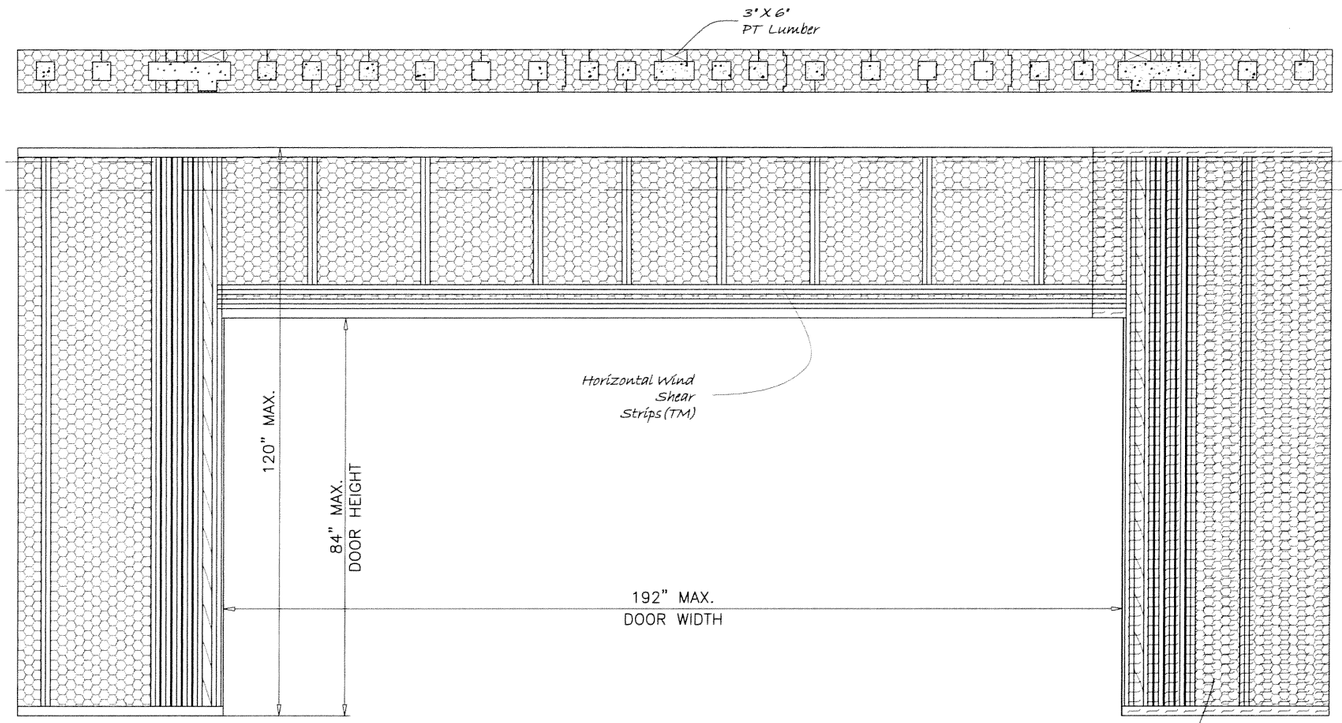

WALL EXTERIOR ELEVATION WITH GARAGE DOOR OPNG.

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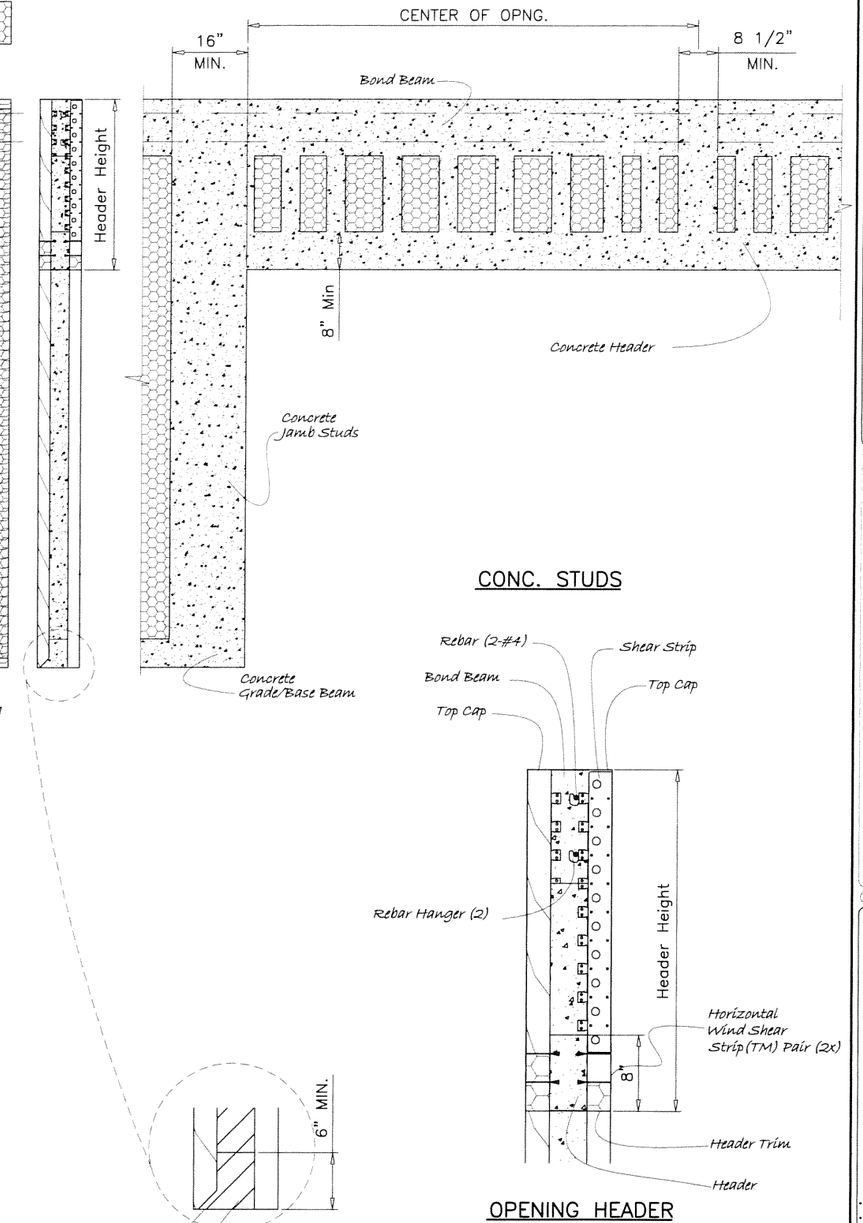
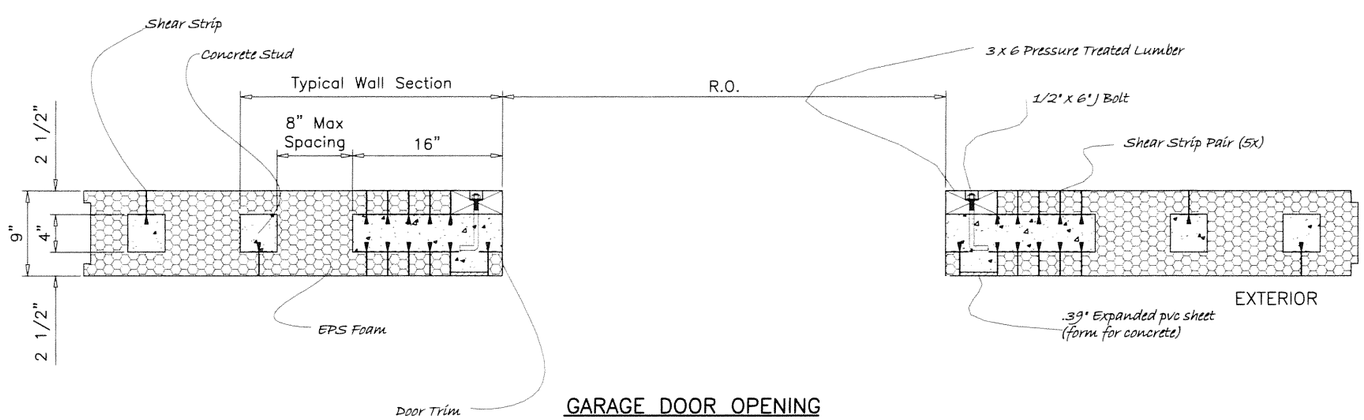


CONC. STUDS

OPENING HEADER

BASE BEAM



GARAGE DOOR OPENING

QUAD JAMB STUD

JAVAD AHMAD
TEXAS PE # 106516
JAVAD AHMAD
OCT 16 2014

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WALL-PANELS\14-01HI

EPS/CONCRETE COMPOSITE WALL SYSTEM

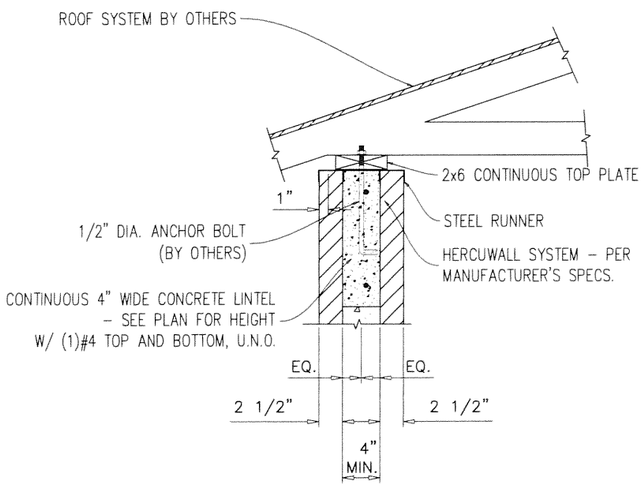
HERCUWALL INC.
1720 W. 10TH ST, SUITE 101
TEMPE, AZ. 85281
TEL. (800) 289-3139 FAX. (480) 284-6535

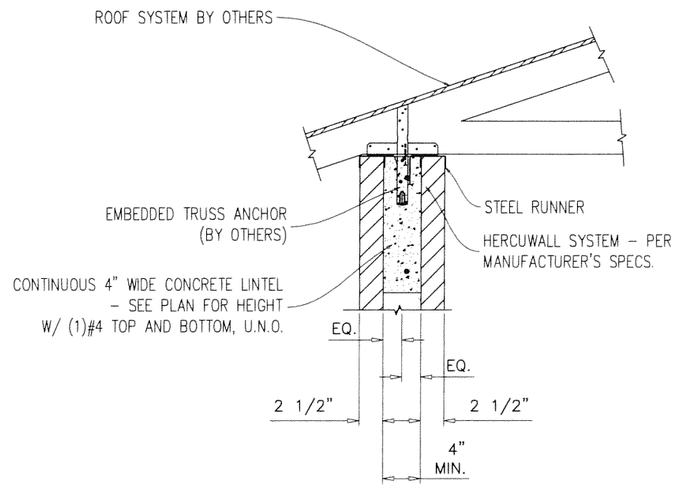
revisions:			
no	date	by	description

date: 01-06-14
scale: 1/16" = 1"
dr. by: HAMID
chk. by:

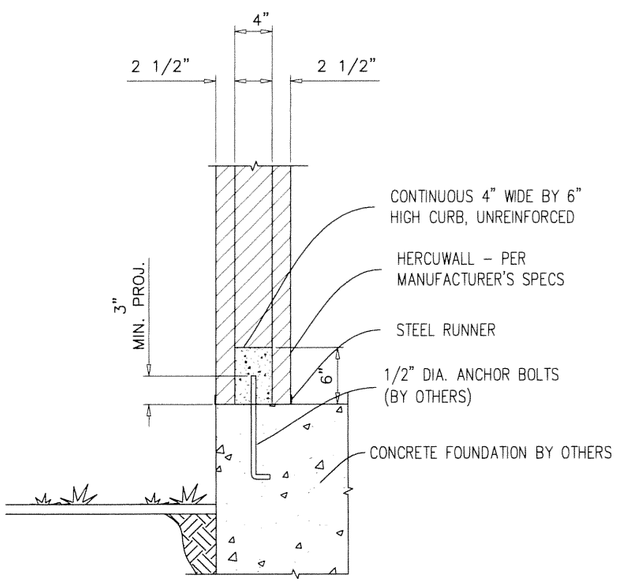
drawing no.
14-01

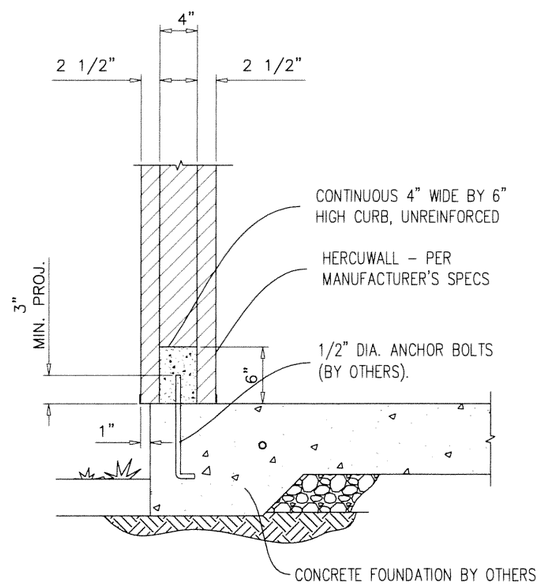
sheet 7 of 8





TYPICAL TOP CONNECTIONS





TYPICAL BOTTOM CONNECTIONS

JAVAD AHMAD
TEXAS PE # 106516
JAVAD AHMAD
OCT 16, 2014

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
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WALL-PANELS\14-01HI

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