

**GENERAL**

- A. THESE GENERAL NOTES ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES.
- B. NOT ALL EXISTING CONDITIONS, PROPOSED CONDITIONS, OR UTILITIES ARE SHOWN ON THE STRUCTURAL DRAWINGS. COORDINATE STRUCTURAL WORK WITH THE WORK OF OTHER TRADES. IN CASE OF CONFLICT, NOTIFY THE ENGINEER OF RECORD.
- C. THE STRUCTURE HAS BEEN DESIGNED TO RESIST DESIGN LOADS ONLY AS A COMPLETE STRUCTURE. APPLICATIONS OF CONSTRUCTION LOADS TO THE PARTIALLY COMPLETED STRUCTURE SHALL BE CONSIDERED AND SO INCLUDED IN THE DESIGN OF SHORING, BRACING, FORMWORK AND STRUCTURE DURING ERECTION AND UNTIL ALL PERMANENT CONNECTIONS ARE MADE. TEMPORARY BRACING FOR THE STRUCTURE MUST BE PROVIDED IN ALL DIRECTIONS.
- D. ONLY USE DIMENSIONS INDICATED ON THE DRAWINGS. DO NOT SCALE DRAWINGS.
- E. ELEVATIONS INDICATED ON THE STRUCTURAL DRAWINGS ARE BASED ON A PROJECT DATUM INDICATED ON THE ARCHITECTURAL DRAWINGS.

**DESIGN CRITERIA:**

- A. VIRGINIA UNIFORM STATEWIDE BUILDING CODE (VUBC), 2012 EDITION
- B. ASCE 7-10, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
- C. ACI 318-14, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- D. AISI 360-10 SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS
- E. AISI S100-12 SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS
- F. NDS-2015, NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION

**DELEGATED ENGINEERING:**

THE FOLLOWING SYSTEMS REQUIRE DELEGATED ENGINEERING. REVIEW SPECIFICATIONS FOR SUBMITTAL REQUIREMENTS.

- A. COLD-FORMED METAL FRAMING AND TRUSSES.
- B. STRUCTURAL STEEL CONNECTIONS.
- C. STEEL OPEN WEB JOISTS.
- D. ACCESS LADDERS.
- E. GATES, DOORS, AND FENESTRATION SYSTEMS.

**DESIGN LOADING:**

- A. ROOF SUPERIMPOSED DEAD LOADS: 10 PSF
- ROOF LIVE LOADS: 20 PSF
- B. SNOW LOADING:
  - 1. GROUND SNOW LOAD, P<sub>g</sub>: 10 PSF
  - 2. FLAT-ROOF SNOW LOAD, P<sub>f</sub>: 7 PSF
  - 3. SNOW EXPOSURE FACTOR, C<sub>e</sub>: 1.00
  - 4. SNOW LOAD IMPORTANCE FACTOR, I<sub>s</sub>: 1.00
  - 5. THERMAL FACTOR, C<sub>t</sub>: 1.00
  - 6. SNOWDRIFT LENGTH, S<sub>dL</sub>: 6'-0"
  - 7. SNOWDRIFT LOAD, S<sub>d</sub>: 38 PSF
- C. WIND LOADING
  - 1. ULTIMATE DESIGN WIND SPEED, VULT: 118 MPH
  - 2. NOMINAL WIND SPEED, VASD: 92 MPH
  - 3. RISK CATEGORY (TABLE 1.5-1, ASCE 7): II
  - 4. WIND EXPOSURE: B
  - 5. ENCLOSURE CLASSIFICATION: ENCLOSED (+/- 0.18)
  - 6. COMPONENT AND CLADDING: REF. CHARTS THIS SHEET
  - 7. NET UPLIFT LOADING (ASD - STEEL JOIST) PRESSURES: USE 10 PSF MAX DEAD LOAD FOR UPLIFT CALCULATIONS. USE 22 PSF MIN. UPLIFT LOAD

**D. SEISMIC LOADING (DESIGN CATEGORY AND CLASS)**

- 1. RISK CATEGORY: II
- 2. SEISMIC IMPORTANCE FACTOR: 1.0
- 3. MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS
  - a. S<sub>s</sub>: 0.098 g
  - b. S<sub>1</sub>: 0.047 g
- 4. SITE CLASS: D
- 5. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS
  - a. S<sub>s</sub>: 0.098 g
  - b. S<sub>1</sub>: 0.079 g
- 6. SEISMIC DESIGN CATEGORY: B
- 7. BASIC SEISMIC FORCE-RESISTING SYSTEMS: 1" ASCE 7-10 TABLE 12.2-1
- 8. DESIGN BASE SHEAR (S): 30 KIPS
- 9. SEISMIC RESPONSE COEFFICIENT, C<sub>s</sub>: 0.1
- 10. RESPONSE MODIFICATION COEFFICIENT(S), R: 3.0
- 11. ANALYSIS PROCEDURE USED: ASCE 7-10, EQUIV. LATERAL METHOD

**E. FLOOD DESIGN DATA:** NOT APPLICABLE

**F. DESIGN LOAD-BEARING VALUES OF SOIL:** 2000PSF

**01003 SUBMITTALS**

- A. SEE SECTION 01003-03 IN THE PROJECT MANUAL AND SPECIFICATIONS FOR THE LIST OF REQUIRED STRUCTURAL SUBMITTALS / SHOP DRAWINGS.
- B. IN ADDITION TO THE SUBMITTALS LISTED IN THE PROJECT MANUAL AND SPECIFICATIONS, THE FOLLOWING SHOP DRAWINGS IS REQUIRED:
  - 1. PREFABRICATED LIGHT GAUGE METAL ROOF TRUSSES.
  - 2. CLIPS, SCREWS, BOLTS, AND FASTENER PRODUCT SHEETS
  - 3. SEE SECTION 01002-14 "SHOP DRAWINGS SUBMITTAL" IN THE PROJECT MANUAL AND SPECIFICATIONS FOR SUBMITTAL RESPONSIBILITIES AND REQUIREMENTS.

**02001 EARTHWORK / FOUNDATION**

- A. FOUNDATION DESIGN IS BASED UPON THE FOLLOWING SOILS REPORT: COMPANY NAME: GSE SOLUTIONS, INC. DATE: JULY 18, 2017 GET PROJECT NO. VB17-228G THE DESIGN ALLOWABLE SOIL BEARING PRESSURE IS LISTED IN THE DESIGN LOADING CRITERIA.
- B. SEE SECTION 02001-04 IN THE PROJECT MANUAL AND SPECIFICATIONS FOR EARTHWORKS TO INCLUDE BUT NOT LIMITED TO:
  - 1. PREPARING AND GRADING SUBGRADES FOR SLABS-ON-GRADE
  - 2. EXCAVATING AND BACKFILLING FOR BUILDINGS AND STRUCTURES
  - 3. DRAINAGE AND MOISTURE - CONTROL FILL COARSE FOR SLABS-ON-GRADE
  - 4. EXCAVATING AND BACKFILLING TRENCHES WITHIN BUILDING LINES
  - 5. MATERIAL, INSPECTION, AND TESTING REQUIREMENTS
- C. ANY FILL REQUIRED TO BACKFILL EXCAVATED AREAS TO ACHIEVE FINISH GRADE IN STRUCTURAL AREAS SHALL BE AS INDICATED BY GEOTECHNICAL ENGINEER. THE FILL SHALL BE PLACED IN LEVEL LIFTS NOT EXCEED 12" (1.00M) THICKNESS. FILL SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE SOIL'S MODIFIED PROCTOR DENSITY. DENSITY IS DETERMINED BY ASTM SPECIFICATION D-1557.
- D. IN-PLACE DENSITY TESTS SHALL BE PERFORMED BY AN EXPERIENCED ENGINEERING TECHNOLOGIST. TESTS SHALL BE PERFORMED AT EACH 2,000 SQUARE FEET, IN EVERY COLUMN SPACING LINE, AND ALONG EVERY FOOTING. COPIES OF THE TEST REPORTS SHALL BE FURNISHED TO THE ARCHITECT.
- E. REMOVE FREE WATER FROM EXCAVATIONS BEFORE PLACING CONCRETE. WATER TABLE ASSUMED BELOW 6'-0" UNLESS OTHERWISE INDICATED ON FOOTINGS.
- F. CAUTION SHOULD BE USED WHEN OPERATING VIBRATORY COMPACTING EQUIPMENT NEAR THE EXISTING STRUCTURE TO AVOID THE RISK OF DAMAGE TO THE STRUCTURE.
- G. REFER TO ARCHITECTURE DRAWINGS FOR ANY NECESSARY WATERPROOFING

**03301 CAST-IN-PLACE CONCRETE**

- A. SEE SECTION 03301 IN THE PROJECT MANUAL AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO:
  - 1. GENERAL REQUIREMENTS
    - a. SUBMITTALS
    - b. QUALITY ASSURANCE - REFERENCE SPECIFICATION REQUIREMENTS
  - 2. PRODUCT / MATERIAL REQUIREMENTS
  - 3. EXECUTION OF WORK REQUIREMENTS
    - a. SHORING
    - b. VAPOR RETARDER
    - c. JOINTS
    - d. PLACEMENT / FINISHING
    - e. CURING
  - 4. QUALITY CONTROL - TESTING REQUIREMENTS
- B. SUMMARY OF PROJECT MANUAL AND SPECIFICATIONS SECTION 03301-02 PRODUCTS:
  - 1. CONCRETE STRENGTH: 4,000 PSI
  - 2. STEEL REINFORCEMENT: 60 KSI
  - 3. PLAIN-STEEL WIRE FABRIC: ASTM A1064 FLAT SHEETS

**04200 UNIT MASONRY**

- A. SEE SECTION 04200 IN THE PROJECT MANUAL AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO:
  - 1. GENERAL REQUIREMENTS
    - a. SUBMITTALS
    - b. MATERIAL REQUIREMENTS
    - c. HOT-WEATHER AND COLD-WEATHER REQUIREMENTS
  - 2. PERFORMANCE REQUIREMENTS
    - a. MASONRY COMPRESSIVE STRENGTH (f<sub>m</sub>): 1,500-PSI
  - 3. PRODUCTS
  - 4. EXECUTION
  - 5. FIELD QUALITY CONTROL
- B. SUMMARY OF PROJECT MANUAL AND SPECIFICATIONS SECTION 04200-03 PRODUCTS:
  - 1. CONCRETE MASONRY UNITS: ASTM C 90 - NORMAL WEIGHT, TYPE (I) MOISTURE CONTROLLED
  - 2. MORTAR: ASTM C 270, TYPE S
  - 3. GROUT: ASTM C476, COARSE (MIN. 2,000-PSI)
  - 4. STEEL REINFORCING BARS: ASTM A 615 - GRADE 60
  - 5. MASONRY JOINT REINFORCEMENT: ASTM A 951 HOT-DIP GALVANIZED CARBON STEEL WIRE
- C. LAP SPlice REINFORCEMENT IN CMU LENGTH + 21 INCHES (#5 BARS)

**05120 STRUCTURAL STEEL**

- A. SEE SECTION 05120 IN THE PROJECT MANUAL AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO:
  - 1. GENERAL REQUIREMENTS
    - a. FABRICATOR REQUIREMENTS
    - b. SUBMITTALS
    - c. CODE REQUIREMENTS
  - 2. PRODUCT / MATERIAL REQUIREMENTS
  - 3. PAINTING REQUIREMENTS
  - 4. EXECUTION OF WORK REQUIREMENTS
    - a. FABRICATION
    - b. ERECTION
  - 5. QUALITY ASSURANCE REQUIREMENTS (INSPECTIONS & TESTING)
- B. SUMMARY OF PROJECT MANUAL AND SPECIFICATIONS 05120 PRODUCTS:
  - 1. MATERIALS:
    - a. W SHAPES: ASTM A992 (50 KSI)
    - b. TUBE SHAPES: ASTM A500 GR. B (46 KSI)
    - c. CHANNELS AND ANGLES: ASTM A36 (36 KSI)
    - d. PLATES: ASTM A36 (36 KSI)
    - e. BOLTS: ASTM A 325
    - f. ANCHOR BOLTS/RODS: ASTM F 1554, GRADE 36
    - g. ANCHOR BOLT WASHERS: ASTM F 844
    - h. ELECTRODES FOR WELDING: AWS CODE E70XX
  - 2. GALVANIZE STEEL MEMBERS INDICATED ON PLANS
  - 3. COATING REQUIREMENTS
    - a. CONFORM TO PARAGRAPH 8.1 OF ASTM A 123, TABLE 1 OF ASTM A 153, OR TABLE 2 OF ASTM A 767 AS APPROPRIATE.
    - b. SURFACE FINISH: CONTINUOUS, ADHERENT, AS SMOOTH AND EVENLY DISTRIBUTED AS POSSIBLE AND FREE FROM ANY DEFECT DETRIMENTAL TO THE END USE OF THE COATED ARTICLE.
    - c. ADHESION: WITHSTAND NORMAL HANDLING CONSISTANT WITH THE NATURE AND THICKNESS OF THE COATING AND NORMAL USE OF THE ARTICLE.
  - 4. REPAIR OF DAMAGED COATING: REPAIR DAMAGED AREAS BY WELDING, FLAME CUTTING OR DURING HANDLING, TRANSPORT OR ERECTION BY ONE OF THE APPROVED METHODS IN ACCORDANCE WITH ASTM A 780 WHENEVER DAMAGE EXCEEDS 3/16" IN WIDTH, MINIMUM THICKNESS REQUIREMENTS FOR THE REPAIR ARE THOSE DESCRIBED IN ASTM A123 SECTION 8. CURRENT EDITION.
  - 5. GROUT UNDER BEARING PLATES SHALL BE NON-METALLIC, NON-SHRINK TYPE WITH A COMPRESSIVE STRENGTH OF AT LEAST 8000 PSI WHEN BEARING ON 3000 PSI CONCRETE AND 8000 PSI WHEN BEARING ON 4000 PSI CONCRETE.
- C. TEMPLATES SHALL BE PROVIDED FOR ALL ANCHOR BOLTS/RODS CAST IN CONCRETE.

**05210 STEEL JOISTS**

- A. SEE SECTION 05210 IN THE PROJECT MANUAL AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO:
  - 1. GENERAL REQUIREMENTS - STEEL JOISTS
    - a. SUBMITTALS
    - b. QUALITY ASSURANCE - REFERENCE SPECIFICATION REQUIREMENTS
    - c. DELIVERY, STORAGE, AND HANDLING REQUIREMENTS
  - 2. PRODUCT / MATERIAL REQUIREMENTS
    - a. JOISTS, BRIDGING, AND ACCESSORIES
    - b. PAINTING
  - 3. EXECUTION OF WORK REQUIREMENTS
    - a. INSTALLATION
  - 4. QUALITY ASSURANCE REQUIREMENTS (INSPECTIONS & TESTING)
- B. ALL JOISTS SHOWN IN THE PLANS ARE MINIMUM SIZES. DEPTH CANNOT BE INCREASED WITHOUT WRITTEN APPROVAL FROM ENGINEER OF RECORD.
- C. STEEL JOIST FRAMING SHALL BE DESIGNED PER THE LOADING SHOWN IN SHEETS S1 & S3
- D. DIAGONAL BRIDGING / BRACING SHALL BE BETWEEN ADJACENT JOISTS WHENEVER BOTTOM CHORD HORIZONTAL BRIDGING IS DISCONTINUOUS.

**05310 STEEL DECK**

- A. REFER TO ROOF PLAN FOR METAL DECK SIZE AND ATTACHMENT INFORMATION.
- B. SEE SECTION 05310 IN THE PROJECT MANUAL AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO:
  - 1. GENERAL REQUIREMENTS
    - a. SUBMITTALS
    - b. QUALITY ASSURANCE - REFERENCE SPECIFICATION REQUIREMENTS
  - 2. PRODUCT / MATERIAL REQUIREMENTS
  - 3. EXECUTION OF WORK REQUIREMENTS
    - a. INSTALLATION
    - b. ACCESSORIES
    - c. GALVANIZING REPAIR
  - 4. QUALITY ASSURANCE REQUIREMENTS (INSPECTIONS & TESTING)

**05400 COLD-FORMED METAL FRAMING**

- A. SEE SECTION 05400 IN THE PROJECT MANUAL AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO:
  - 1. GENERAL REQUIREMENTS
    - a. STRUCTURAL PERFORMANCE
    - b. SUBMITTALS
    - c. QUALITY ASSURANCE - REFERENCE SPECIFICATION REQUIREMENTS
  - 2. PRODUCT / MATERIAL REQUIREMENTS
    - a. STEEL REQUIREMENTS
    - b. WALL FRAMING
    - c. JOIST FRAMING
    - d. FABRICATION
    - e. FASTENERS AND ACCESSORIES
    - f. REPAIR PAINTING
  - 3. EXECUTION OF WORK REQUIREMENTS
    - a. INSTALLATION
      - 1. GENERAL
      - 2. TOLERANCES
      - 3. LOAD-BEARING WALL
      - 4. CURTAIN-WALL
      - 5. JOIST INSTALLATION
    - b. REPAIRS
- B. ALL FRAMING SHOWN IN THE PLANS ARE MINIMUM SIZES. DIMENSIONS CANNOT BE INCREASED WITHOUT WRITTEN APPROVAL FROM ENGINEER OF RECORD.
- C. PRE-ENGINEERED ROOF TRUSSES SHALL BE DESIGNED PER THE LOADING SHOWN IN DRAWINGS.
- D. PRE-ENGINEERED ROOF TRUSSES SHALL BE DELIVERED, HANDLED, STORED, AND INSTALLED PER AISI S214-07.
- E. ALL CLIPS AND FASTENING HARDWARE SHALL BE TESTED AND RATED FOR THE DESIGN PRESSURE.
- F. LIGHT GAUGE FRAMING SYSTEMS INCLUDING TRUSS SYSTEMS SHALL INCLUDE ALL NECESSARY PARTS AND ACCESSORIES. TEMPORARY AND PERMANENT BRACING SHALL BE PROVIDED AS A COMPLETE SYSTEM (ANCHORAGE INCLUDED).

**06100 ROUGH CARPENTRY / SHEATHING**

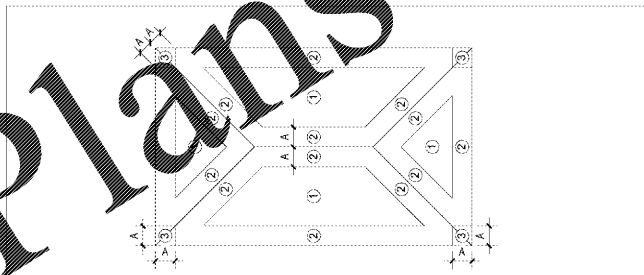
- A. SEE SECTION 06100 IN THE PROJECT MANUAL AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO:
  - 1. PRODUCT / MATERIAL REQUIREMENTS
    - a. LUMBER - GENERAL
    - b. WOOD-PRESERVATIVE-TREATED MATERIALS
    - c. DIMENSIONAL LUMBER-APPROVED GRADES AND SPECIES
    - d. WOOD-BASED STRUCTURAL USE PANELS
    - e. FASTENERS AND ANCHORS
  - 2. EXECUTION OF WORK REQUIREMENTS
    - a. INSTALLATION
      - 1. TOLERANCES
      - 2. FRAMING CONNECTION REQUIREMENTS
        - a. "RECOMMENDED NAILING SCHEDULE" AFPA'S NDS FOR WOOD CONSTRUCTION
      - b. INTERNATIONAL BUILDING CODE TABLE 2304.9.1
    - 3. FASTENER COATING REQUIREMENTS
    - 4. REQUIRED PRACTICE STANDARDS REFERENCES
      - a. AMERICAN PLYWOOD ASSOCIATION E30
      - b. AMERICAN PLYWOOD ASSOCIATION T&S WOOD STRUCTURAL PANELS OVER METAL FRAMING
- B. WALL SHEATHING: APA RATED SHEATHING EXTERIOR (C-C GRADE)
  - 1. NOMINAL THICKNESS: 5/8 INCH
  - 2. SPAN RATING: 2416
  - 3. BLOCKING: 2" WIDE 4x4 MIL STRAPPING
  - 4. SHEATHING SHOULD BE PLACED PERPENDICULAR TO SUPPORTS
- C. ROOF SHEATHING: APA RATED SHEATHING, EXTERIOR (C-C GRADE)
  - 1. NOMINAL THICKNESS: 5/8 INCH
  - 2. SPAN RATING: 3216
  - 3. SHEATHING SHOULD BE PLACED PERPENDICULAR TO SUPPORTS
- D. PARAPET SHEATHING: APA RATED SHEATHING, EXTERIOR (C-C GRADE)
  - 1. NOMINAL THICKNESS: 5/8 INCH
  - 2. SPAN RATING: 2416
  - 3. SHEATHING SHOULD BE PLACED PERPENDICULAR TO SUPPORTS
- E. FASTENERS
  - 1. GENERAL: PROVIDE FASTENERS OF SIZE AND TYPE INDICATED THAT COMPLY WITH THE REQUIREMENTS SPECIFIED IN THIS ARTICLE FOR MATERIALS AND MANUFACTURERS.
  - 2. SCREWS FOR FASTENING WOOD STRUCTURAL PANELS TO COLD-FORMED METAL FRAMING: ASTM C 954, EXCEPT WITH WAFER HEADS AND REAMER POINTS. LENGTH AS RECOMMENDED BY SCREW MANUFACTURER FOR MATERIAL BEING FASTENED.
- F. COORDINATE WALL, PARAPET, AND ROOF SHEATHING INSTALLATION WITH FLASHING AND JOINT-SEALANT INSTALLATION SO THAT MATERIALS ARE INSTALLED IN SEQUENCE AND MANNER THAT PREVENT EXTERIOR MOISTURE FROM PASSING THROUGH COMPLETELY.
- G. COORDINATE SHEATHING INSTALLATION WITH INSTALLATION OF MATERIALS INSTALLED OVER SHEATHING. SHEATHING IS NOT EXPOSED TO PRECIPITATION OR LEFT EXPOSED AT END OF THE WORKDAY. WHEN RAIN IS FORECAST.
  - H. ALL PANELS (GENERAL): IDENTIFICATION REQUIREMENTS. EACH PANEL SHALL BE IDENTIFIED WITH THE APPROPRIATE DESIGNATION OF APA.
  - I. PANELS HAVING ANY EDGE SURFACE EXPOSED LONG TERM TO WEATHER SHALL BE CLASSIFIED EXTERIOR.
  - J. PANELS HAVING AN EDGE SURFACE EXPOSED LONG TERM TO WEATHER SHALL BE AT LEAST EQUIV. TO THAT SHOWN ON THE DRAWINGS. APPLICATION SHALL BE IN ACCORDANCE WITH APA.
  - K. SPACING REQUIRED AT ALL PANEL ENDS AND EDGES.
- J. ROOF SHEATHING:
  - 1. INSTALL WITH LONG DIMENSION OR STRENGTH AXIS OF THE PANEL ACROSS SUPPORTS.
  - 2. FASTEN TO LIGHT GAUGE METAL TRUSSES USING #10 BUGLE HEAD SCREWS SPACED AT 6" ON CENTER ALONG UNSUPPORTED EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS
- K. WALL / PARAPET SHEATHING:
  - 1. FASTEN TO LIGHT GAUGE METAL STUDS USING #10 BUGLE HEAD SCREWS SPACED AT 6 INCHES ON CENTER ALONG UNSUPPORTED EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS
  - 2. APPLY WEATHER-RESISTANT BARRIER OVER PANEL WALL SHEATHING.

**09960 COATINGS FOR STEEL**

- A. REFER TO SPECIFICATIONS FOR GENERAL REQUIREMENTS, PRODUCTS, AND EXECUTION OF WORK
- B. ASPHALTIC BASED CORROSION RESISTANCE COATING SHALL BE MADE WITH AN ASPHALT-BASE EMULSION COATING SYSTEM PER ASTM D 1187.
- C. APPLY A MINIMUM 1/16" THICK COATING IN TWO APPLICATIONS.
- D. COATING TO BE APPLIED ON ALL SIDES OF MEMBERS - TO INCLUDE STEEL TO BE ADJACENT TO CAST-IN-PLACE CONCRETE.
- E. COAT STRUCTURAL ANCHOR BOLTS, WELDS, AND ALL COMPONENTS IN THE IDENTIFIED AND DEFINED AREA.
- F. ALL STEEL AND STEEL COMPONENTS (I.E. BASE PLATES AND ANCHOR BOLTS) EXPOSED TO SOIL SHALL BE COATED FROM THE FOUNDATION (LOWEST LEVEL) UP TO 6-INCHES ABOVE THE SLAB OR FINAL GRADE - WHICHEVER IS GREATER.

**LIST OF STRUCTURAL ABBREVIATIONS**

AB	ANCHOR BOLTS	MATL	MATERIAL
ADDL	ADDITIONAL	MAK	MAXIMUM
ALT	ALTERNATE	MB	MASONRY BEAM
ANCH	ANCHOR	MC	MOMENT CONNECTION
APPROX	APPROXIMATE	MCC	MASONRY COLUMN
ARCH	ARCHITECT / ARCHITECTURAL	MCJ	MASONRY CONTROL JOINT
BB	BOND BEAM	MECH	MECHANICAL
BLDG	BUILDING	MEZZ	MEZZANINE
BSM	BEAM	MFR	MANUFACTURE / MANUFACTURERS
BOT	BOTTOM OF	MIN	MINIMUM
B07 / BTM	BOTTOM	MISC	MISCELLANEOUS
BP	BASE PLATE / BEARING PLATE	MTL	METAL
BRG	BEARING	NTC	NOT IN CONTRACT
BTW	BETWEEN	NMBAL	NON-METAL
CANT	CANTILEVER	NTS	NOT TO SCALE
CB	CONCRETE BEAM	OC	ON CENTER
CC	CONCRETE COLUMN	OPNG	OPENING
CAST IN PLACE	CAST IN PLACE	OPP	OPPOSITE
CJP	CONTROL JOINT	PARAPET	PARAPET WALL
CL	CENTERLINE	POC	PRECAST CONCRETE
CLR	CLEAR / CLEARANCE	PL	PLATE
COL	COLUMN	PLF	POUNDS PER LINEAR FOOT
CONC	CONCRETE	PRE-ENG	PRE-ENGINEERED
CONN	CONNECTION	PRE-EN	PRE-ENGINEERED METAL BUILDING
CONSTR	CONSTRUCTION	PRE-FAB	PRE-FABRICATED
CONT	CONTINUOUS	PRIM	PRIMARY
CORR	CORRUGATED	PROJ	PROJECTION
CMU	CONCRETE MASONRY UNIT	PSF	POUNDS PER SQUARE FOOT
DET	DETAIL	PSI	POUNDS PER SQUARE INCH
DIA / DIM	DIAMETER	PSI	POUNDS PER SQUARE INCH
DM	DIMENSION	PSI	POUNDS PER SQUARE INCH
DN	DOWN	PW	PANEL WIDTH
DR	DRAIN	RAD	RADIUS
DWG	DRAWING	RB	ROOF BEAM (MASONRY)
DWL	DRAINAGE	RCP	REINFORCED CONCRETE PIPE
EACH	EACH	RFD	ROOF DRAIN
EE	EACH EDGE	REF	REFERENCE
EF	EACH FACE	REINF	REINFORCING
EL	ELEVATION	REQD	REQUIRED
EL / ELEV	ELEVATION	REVIS	REVISION
ELECT	ELECTRICAL	RTU	ROOF TOP UNIT
EMB	EMBEDMENT	RW	RETAINING WALL
ENGR	ENGINEER	SECT	SECTION
EQUAL	EQUAL	SCH / SCHED	SCHEDULE
EQUIP	EQUIPMENT	SIM	SIMILAR
EQUIV	EQUIVALENT	SP / SPD	SPACE(S)
ES	EACH SIDE	SPECS	SPECIFICATIONS
EXIST	EXISTING	SQ	SQUARE
EXP	EXPANSION	SS	STAINLESS STEEL
EXT	EXTERIOR	STD	STANDARD
EW	EACH WAY	STSL	STEEL
FAB	FABRICATE	STRUC	STRUCTURAL
FD	FLOOR DRAIN	SYM	SYMMETRICAL
FDN	FOUNDATION	T & B	TOP AND BOTTOM
FF	FINISHED FLOOR	T & G	TONGUE AND GROOVE
FIN	FINISHED	TE	THICKENED EDGE
FL / FLR	FLOOR	THK	THICK
FTG	FOOTING	THRD	THREADED
GA	GAGE / GUAGE	TB	TIE BEAM
GALV / GV	GALVANIZED	TOC	TOP OF CONCRETE
GC	GENERAL CONTRACTOR	TOM	TOP OF MASONRY
HAS	HEADED ANCHOR STUD	TOS	TOP OF STEEL
HB	HIGH BEAM (MASONRY)	TYP	TYPICAL
HORIZ	HORIZONTAL	TS	TUBE STEEL
HSB	HIGH STRENGTH BOLTS	UNO	UNLESS NOTED OTHERWISE
HSS	HOLLOW STEEL SECTION	UNO	UNLESS OTHERWISE NOTED
HT	HEIGHT	VERT	VERTICAL
INT	INTERIOR	VIF	VIRGINIA FIELD
JST	JOIST	W	WIDE FLANGED
JT	JOINT	WB	WALL BEAM (TLT)
K	KIPS	WC	WALL COLUMN (TLT)
KO	KNOCK OUT	WI	WITH
KSF	KIPS PER SQUARE FOOT	WO	WITHOUT
KSI	KIPS PER SQUARE INCH	WOOD	WOOD
L	ANGLE	WGT	WEIGHT
LB	LOW BEAM (MASONRY)	WH	WEIRHOLE
LBS	POUNDS	WP	WORKING POINT
LD	DEVELOPMENT LENGTH	WT	STEEL TIE SECTION
LGH	LONG DIMENSION HORIZONTAL	WWF	WELDED WIRE FABRIC
LGH	LONG DIMENSION VERTICAL	@	AT
LLB	LONG LEG BACK TO BACK	&	AND
LLH	LONG LEG HORIZONTAL		
LLV	LONG LEG VERTICAL		

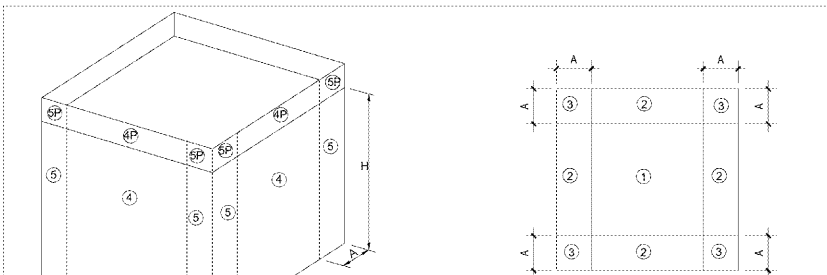


ULTIMATE (LRFD) WIND PRESSURES (ASCE 7-10) FOR COMPONENTS AND CLADDING

EFFECTIVE AREA (SQ FT)	ZONE 1		ZONE 2		ZONE 3		ZONE 4		ZONE 5	
	POS. (PSF)	NEG. (PSF)	POS. (PSF)	NEG. (PSF)	POS. (PSF)	NEG. (PSF)	POS. (PSF)	NEG. (PSF)	POS. (PSF)	NEG. (PSF)
10	21.0	-33.3	21.0	-57.9	21.0	-65.7	36.4	-39.4	36.4	-48.7
20	19.1	-32.4	19.1	-53.3	19.1	-60.1	34.7	-37.8	34.7	-45.4
50	16.6	-31.1	16.6	-47.2	16.6	-52.6	32.6	-35.6	32.6	-41.1
A ≥ 100	16.0	-30.2	16.0	-42.5	16.0	-47.2	30.9	-34.0	30.9	-37.8

**NOTES:**

- 1. ROOF OVERHANG PRESSURES:
  - a. ZONE 2 OH: +16 PSF AND -32.5 PSF
  - b. ZONE 3 OH: +16 PSF AND -55.0 PSF
- 2. "A" DENOTES PARAPET PRESSURE VALUES.
- 3. "T" DENOTES EDGE STRIP = 6'-0"
- 4. POSITIVE & NEGATIVE SIGNS SIGNIFY PRESSURES ACTING TOWARDS AND AWAY FROM THE BUILDING SURFACES, RESPECTIVELY (FULL HEIGHT, UNLESS NOTED).
- 5. MULTIPLY THE WIND PRESSURES BY A FACTOR OF 0.8 TO OBTAIN ALLOWABLE (ASD) WIND PRESSURES.



ULTIMATE (LRFD) WIND PRESSURES FOR COMPONENTS &