



**Cogan**  
Since 1901



**Mezzanines**  
Increase Floor Space

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**ENGINEERING SERVICES**

## PERMIT SERVICES

### Description

Permit Services include the specific documents that may be required when applying for a permit from the city.

Building regulations in your city/state will dictate the level of documentation necessary to obtain a permit for your project. It is the responsibility of the purchaser to be aware of which documents are needed. All permits are to be obtained at the purchaser's expense.



## PE STAMPED PLANS WITH CALCULATIONS AND CONNECTION DETAILS

**CAPACITY / DESIGN CRITERIA DATA**

MAX. VERTICAL DEFLECTION- L/300	300
STOREY HEIGHT (in)	114
SEISMIC DATA:	
S <sub>1</sub>	1.000
S <sub>2</sub>	0.500
Site Class	D
S <sub>ms</sub>	0.733
S <sub>m1</sub>	0.500
Occupancy Category	CC

**PROFESSIONAL ENGINEER STAMP**

**PLAN AND ELEVATION VIEW WITH COLUMN AND BEAMS LOCATIONS**

**BEAM & COLUMN SCHEDULE INCLUDING BEAM LOADS AND COLUMN LOADS TRANSFERRED TO SLAB**

Beam/Column	P <sub>fact</sub> (kips)	P <sub>load</sub> (kips)	M <sub>u</sub> (ft-k)		
1/2"	5.00	0.40	2.97	8.37	1.77
1/2"	10.00	0.80	2.46	13.26	1.18
1/2"	3.96	0.32	2.46	6.74	1.40
1/2"	7.19	0.58	0.33	8.10	2.10
1/2"	10.21	0.82	0.00	11.03	4.04
1/2"	10.00	2.50	2.50	8.37	
1/2"	10.00	2.4	13.26		
1/2"	3.88	0.0	18.78		
1/2"	0.48	0.00	6.50		

**EXAMPLE**



**PE STAMPED PLANS WITH CALCULATIONS AND CONNECTION DETAILS**

**STRUCTURAL DRAWINGS INCLUDING DIMENSIONS, DESIGN SPECIFICATIONS AND FASTENERS SPECS.**

**BEAM TO COLUMN**  
BOLT THE BEAM TO THE COLUMN USING TWO BEAM END PLATES WITH FOUR BOLTS TO THE COLUMN AND TWO BOLTS TO THE BEAM. THE CONNECTION IS SHOWN ON THE MEZZANINE PLAN. SEE DRAWING MEZ-101 FOR THE COLUMN END PLATE DETAIL.

**BEAM TO BEAM**  
BOLT THE BEAM TO THE SUPPORTING BEAM WITH TWO END PLATES WITH FOUR BOLTS TO THE SUPPORTING BEAM AND TWO BOLTS TO THE BEAM. THE CONNECTION IS SHOWN ON THE MEZZANINE PLAN. SEE DRAWING MEZ-102 FOR THE END PLATE DETAIL.

**CROSS BRACE XB1**  
120 GC

**CROSS BRACE XB2**  
180 GC

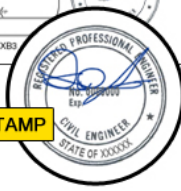
**CROSS BRACE XB3**  
64 GC

**CROSS BRACE XB4**

Material	Spec
STEEL	AISC 360-10
CONCRETE	ACI 308-11
WOOD	NDS 2015
GLASS	AGC 108-11
GLAZING	AGC 108-11
INSULATION	ICC-ES E-1000
FASTENERS	ASTM A325
WELDS	AWSD D1.1
SEALANT	ASTM C1183
ADHESIVE	ASTM F2306
MEMBRANE	ASTM F2306

**EXAMPLE**

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**TYPICAL DETAIL**

**STAIR LANDING**  
SEE DRAWING MEZ-103 FOR THE STAIR LANDING DETAIL.

**LOWER HORIZONTAL EXTENSION**

Material	Spec
STEEL	AISC 360-10
CONCRETE	ACI 308-11
WOOD	NDS 2015
GLASS	AGC 108-11
GLAZING	AGC 108-11
INSULATION	ICC-ES E-1000
FASTENERS	ASTM A325
WELDS	AWSD D1.1
SEALANT	ASTM C1183
ADHESIVE	ASTM F2306
MEMBRANE	ASTM F2306

**EXAMPLE**

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## PE STAMPED PLANS WITH CALCULATIONS AND CONNECTION DETAILS

### PE STAMPED PLANS WITH CALCULATIONS AND CONNECTION DETAILS

COGAN MEZZANINE PE STAMPED PLANS WITH CALCULATIONS AND CONNECTION DETAILS (CONTACT COGAN FOR PRICING)

#### INCLUDED:

This package is ideal when you are applying for a permit from the city. Our engineers will prepare specific drawings detailing the different aspects of the mezzanine that are generally required during the permitting process. Please note that Cogan is not responsible for any delays encountered during plan check and revisions that may be caused by city regulations. The permits are to be obtained at the purchaser's expense. Due to the variation of safety codes between regions, it is also the responsibility of the purchaser and/or end user to ensure that the product complies with all respective Electrical, Fire, Seismic, or Safety Codes, that pertain to the use and installation of the mezzanine. The purchaser and/or end user must arrange for the appropriate installation and testing of the Cogan mezzanine such that all State, Provincial or Local Safety codes are respected.

#### 6 copies of the following:

- Stamped structural plan and elevation drawings including design criteria data.
- Mezzanine classification details and compliance including mezzanine location based on information received by client.
- Dimensions of the overall mezzanine as well as column and beam locations, fastener details and dimensions.
- A copy of the engineering calculations.

\* Please note that 1 (one) stamped version is included with this package. Any revisions and modifications after the approval stage might incur additional costs.

#### Structural drawings including dimensions, design specifications and fastener specifications of the following:

- Bracing
- Column and baseplate
- Beam to column connection
- Beam to beam connection
- Bridging
- Flooring
- Staircase
- Handrail
- Installation drawings and procedure supplied on delivery



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## **PE STAMPED PLANS WITH CALCULATIONS AND CONNECTION DETAILS**

Please note that the purchaser and/or end user is responsible for all quantities and dimensions including the verification of, and coordination with field conditions. The purchaser and/or end user is also responsible for the building classification on all construction and warrants that all construction will be governed by the latest edition of the state or provincial building code (including any revisions or addendums) and/or with any other applicable code or requirements of all authorities having jurisdiction. Cogan mezzanines are designed in compliance with the National Code and the American and Canadian Institute of Steel Construction (NBCC and CISC in Canada and IBC and AISC in the U.S.).

### **NOT INCLUDED:**

- Anchor detail and footing design.