

# BUILDING CODE STUDY DATA

DESIGN PHASE: ~ SD      ~ DD      ~ CD      DATE: \_\_\_\_\_

1) PROJECT: \_\_\_\_\_ PROJECT NO.: \_\_\_\_\_

FACILITY: \_\_\_\_\_  
 \_\_\_\_\_

2) **APPLICABLE CODES:**

- |    |                                    |   |
|----|------------------------------------|---|
| A) | Building Code                      | IBC - 2015<br>IRC - 2015<br>IEBC - 2015   |
| B) | Fire Code                          | NFPA - 101(Life Safety Code) 2015<br>NFPA - 1 2015 (Fire Code)<br>NFPA - 13 (Sprinkler Code) 2013 |
| C) | Mechanical Code                    | IMC - 2015  |
| D) | Plumbing Code                      | National Standard Plumbing Code - 2015  |
| E) | Electric Code                      | NEC - 2014  |
| F) | Energy Standard                    | ASHRAE 90.1 (Latest Edition)  |
| G) | Elevator and Escalator Safety Code | ANSI/ASME A17.1 2013  |
| H) | Accessibility Code                 | MAC (COMAR 05.02.02 & 2010 ADA Standards)   |
| I) | Energy Conservation Code           | IECC - 2015   |

3) **BUILDING USE, CONSTRUCTION CLASSIFICATIONS AND HEIGHT:**

		IBC 2015	NFPA 2015
Use Group	(Sect. 302):	_____	_____
Special Use and Occupancy	(Chapter 4):	_____	_____
Building Height Allowable	(Table 504.3):	_____	_____
Number of Stories	(Table 504.4):	_____	_____
Allowable Area Factor	(Table 506.2)	_____	_____
Actual Building Height:		_____	_____
Unlimited Area Building	(Sec. 507):	_____	_____
Required Separation for Mixed Use Occupancy	(Table 508.4):	_____	_____
Incidental Use Areas	(Table 509):	_____	_____
Fire Separation Distance	(Table 602):	_____	_____



# BUILDING CODE STUDY DATA

**8) FIRE PROTECTION SYSTEM REQUIREMENTS:**

		System Req. (Yes/No)	IBC 2015	NFPA 101-2015 (Ch. 8)
	<b>IBC</b>			
Automatic Sprinklers	(Sec. 903)	_____	_____	_____
Fire Extinguishing System	(Sec. 904)	_____	_____	_____
Standpipe System	(Sec. 905)	_____	_____	_____
Portable Fire Extinguishers	(Sec. 906)	_____	_____	_____
Fire alarm System	(Sec. 907)	_____	_____	_____
Emergency Alarm System	(Sec. 908)	_____	_____	_____
Smoke Control System	(Sec. 909)	_____	_____	_____
Smoke and Heat Vents	(Sec. 910)	_____	_____	_____
Fire Command Center	(Sec. 911)	_____	_____	_____
Fire Dept. Connection	(Sec. 912)	_____	_____	_____
Fire Pumps	(Sec. 913)	_____	_____	_____
Emergency Safety Factor	(Sec. 914)	_____	_____	_____
Carbon Monoxide Detection	(Sec. 915)	_____	_____	_____

**9) MAXIMUM DEAD END DISTANCE:**

Use Group	:	_____
IBC - 2015 (Table 1020.4)	:	_____
NFPA – 2015	:	_____

**10) INTERIOR FINISH REQUIREMENTS:**

	Class	Flame Spread	Smoke Development
IBC- 2015 (Table - 803.11)	_____	_____	_____
NFPA - 2015 (Chapter 10)	_____	_____	_____

**11) MAXIMUM TRAVEL DISTANCE TO EXIT:**

**Actual:**    Show on Life Safety Plan

<b>IBC – 2015</b> <b>(Table - 1017.2)</b>	<b>NFPA – 2015</b> <b>(Sec 7.6.1)</b>
<b>Allowable:</b> _____	_____

# BUILDING CODE STUDY DATA

**12) MINIMUM CORRIDOR WIDTH REQUIREMENTS:**

Occupancy (Table 1020.2)	Width	IBC Reference	NFPA-101 Reference

**CORRIDOR FIRE RESISTANCE RATING (Table 1020.1)**

Occupancy Load	Fire Resistance Rating (Sprinkler)	Fire Resistance Rating (Non- Sprinkler)

**13) PANIC HARDWARE:**

Location	Required	IBC - 2015 (1010.1.10)	NFPA – 101 2015 (7.2.1.7)

**14) STAIR DATA:**

	IBC 2015	NFPA-101 2015 (Table 7.2.2.2.1.1)
Stair Width (Section 1009.3)		
Capacity		
Rated Enclosure (Section 1023.2)		

**15) AREA OF REFUGE:** (Section 1009.6) Yes \_\_\_\_\_ No \_\_\_\_\_  
(NFPA SEC 7.2.12)

**16) ELEVATOR :** IBC 2015 NFPA 2015 ASME A17.1 2013

# BUILDING CODE STUDY DATA

**17) BUILDING FIRE RATINGS:**

	<b>IBC 2015</b> (Table 601- 602)	<b>NFPA-101 2015</b> (Table 8.3.4.2)
<b>STRUCTURAL FRAME</b> Including Columns, Girders, Trusses		
<b>EXTERIOR BEARING WALL</b>		
<b>EXTERIOR NON-BEARING WALL</b>		
<b>INTERIOR BEARING WALL</b>		
<b>INTERIOR NON-BEARING WALL</b>		
<b>FLOOR CONSTRUCTION</b> Including Supporting Beams and Joists		
<b>ROOF CONSTRUCTION</b> Including Supporting Beams and Joists		
<b>FIRE WALLS - USE GROUP</b> Fire Barrier Assemblies (Table 707.3.10) Fire Resistance Rating (Table 706.4)		
<b>VERTICAL EXIT ENCLOSURES</b> Fire Resistance Rating (IBC Section 1023.2 NFPA - 2015 Table 8.3.4.2)		
<b>SHAFTS AND ELEVATOR HOIST                      WAYS</b> Fire Resistance Rating (IBC Section 712 & 713, NFPA - 2015 Table 8.3.4.2)		
<b>EXIT PASSAGEWAY</b> (Sec 1024)		
<b>SMOKE BARRIER</b> (Sec 709)		
<b>EXIT PASSAGEWAY</b> (Sec 1024)		



## BUILDING CODE STUDY DATA

	<u>Required 'U' Value</u> U = 1/R	<u>Required 'R' Value</u> R = 1/U	<u>Provided</u>
<b>Joist Framing</b> (steel or wood)	<b>U 0.033</b>	<b>R30</b>	_____ _____
 <b><u>Slab on Grade</u></b>			
<b>Heated Slab</b>	<b>F 0.65</b>	<b>R 15 for 24" below</b>	_____ _____
<b>Unheated Slab</b>	<b>F 0.54</b>	<b>R 10 for 24" below</b>	_____ _____
 <b><u>Doors</u></b>			
<b>Entrance Door</b>	<b>U 0.77</b>	<b>R 1.29</b>	_____ _____
<b>Un-insulated Metal Door</b>	<b>1.20</b>	<b>R 1.66</b>	_____ _____
<b>Insulated Metal Door</b>	<b>0.60</b>	<b>R 2.00</b>	_____ _____
<b>Wood Door</b>	<b>0.50</b>	<b>R 2.00</b>	_____ _____
 <b><u>Windows</u></b>			
<b>Fixed Fenestration</b>	<b>U 0.38</b>	<b>R 2.63</b>	_____ _____
<b>Operable Fenestration</b>	<b>U 0.45</b>	<b>R 2.22</b>	_____ _____
<b>Sky Light</b>	<b>U 0.50</b>	<b>R 2.0</b>	_____ _____
<b>Curb</b>	<b>U 0.20</b>	<b>R 5.0</b>	_____ _____
 <b><u>Minimum Roof</u></b>			
<b><u>Reflectance/Emittance</u></b>			
<b>(3 yr. Aged) Solar Reflectance</b>	<b>0.55</b>		_____ _____
<b>(3 yr. Aged) Thermal Emittance</b>	<b>0.75</b>		_____ _____