**2018 APPENDIX B**

**BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS**

**(except 1 and 2-family dwellings and townhouses)**

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Zip Code \_\_\_\_\_\_\_\_\_\_\_\_\_

Owner/Authorized Agent: \_\_\_\_\_\_\_\_\_\_\_\_\_ Phone # ( \_\_\_\_\_ ) \_\_\_\_\_ - \_\_\_\_\_\_\_ E-Mail \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Owned By: Select one

Code Enforcement Jurisdiction: Select one

**CONTACT:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

designer firm name license # telephone # e-mail

Architectural \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_)\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Civil \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_)\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Electrical \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_)\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Fire Alarm \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_)\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Plumbing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_)\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mechanical \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_)\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sprinkler-Standpipe \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_)\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Structural \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_)\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Retaining Walls >5' High \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_)\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_)\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

(“Other” should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

**2018 NC BUILDING CODE:** Select one

**2018 NC EXISTING BUILDING CODE:** Select one Select one Select one

**CONSTRUCTED:** (date) \_\_\_\_\_\_\_\_\_\_ **CURRENT OCCUPANCY(S)** (Ch. 3)**:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**RENOVATED:** (date) \_\_\_\_\_\_\_\_\_\_ **PROPOSED OCCUPANCY(S)** (Ch. 3)**:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**RISK CATEGORY** (Table 1604.5): **Current:** Select one **Proposed:** Select one

**BASIC BUILDING DATA**

**Construction Type:** Select one

**Sprinklers:** Select one Select one

**Standpipes:** Select one

**Primary Fire District:** Select one **Flood Hazard Area:** Select one

**Special Inspections Required:** Select one

**Gross Building Area Table**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Floor |  | Existing (sq ft) |  | New (sq ft) |  | Sub-Total |
| 3rd Floor |  |  |  |  |  |  |
| 2nd Floor |  |  |  |  |  |  |
| Mezzanine |  |  |  |  |  |  |
| 1st Floor |  |  |  |  |  |  |
| Basement |  |  |  |  |  |  |
| total |  |  |  |  |  |  |

**Allowable area**

**Primary Occupancy Classification(s):** Select one Select one Select one Select one Select one Select one

**Accessory Occupancy Classification(s):**

**Incidental Uses** (Table 509):

**Special Uses (Chapter 4 – List Code Sections):**

**Special Provisions: (Chapter 5 – List Code Sections)**:

**Mixed Occupancy:** Select one Separation: Select one Exception: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Select one

*Actual Area of Occupancy A + Actual Area of Occupancy B*

< 1

*Allowable Area of Occupancy A Allowable Area of Occupancy B*

< 1.00

*+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + …… = ­­­­­* \_\_\_\_\_\_

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| story no. | description and use | (a)  bldg area per story (actual) | (b)  table 506.24 area | (c)  area for frontage increase1,5 | (D)  allowable area Per story or unlimited2,3 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

1 Frontage area increases from Section 506.3 are computed thus:

1. Perimeter which fronts a public way or open space having 20 feet minimum width = \_\_\_\_\_\_\_ (F)
2. Total Building Perimeter = \_\_\_\_\_\_\_\_ (P)
3. Ratio (F/P) = \_\_\_\_\_\_\_\_\_\_\_ (F/P)
4. W = Minimum width of public way = \_\_\_\_\_\_\_\_ (W)
5. Percent of frontage increase *If* = 100[*F/P* – 0.25] x *W*/30 = \_\_\_\_\_\_\_\_ (%)

2 Unlimited area applicable under conditions of Section 507.

3 Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).

4 The maximum area of open parking garages must comply with Table 406.5.4.

5 Frontage increase is based on the unsprinklered area value in Table 506.2.

**allowable height**

|  |  |  |  |
| --- | --- | --- | --- |
|  | allowable | shown on plans | code reference 1 |
| Building Height in Feet (Table 504.3) 2 |  |  |  |
| Building Height in Stories (Table 504.4) 3 |  |  |  |

1 Provide code reference if the “Shown on Plans” quantity is not based on Table 504.3 or 504.4.

2 The maximum height of air traffic control towers must comply with Table 412.3.1.

3 The maximum height of open parking garages must comply with Table 406.5.4.

**FIRE PROTECTION REQUIREMENTS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **building element** | **fire separation distance (feet)** | **rating** | | **detail #**  **and sheet #** | **design # for**  **rated assembly** | **sheet # for**  **rated penetration** | **sheet # for**  **rated joints** |
| **req'd** | **provided (w/\_\_\_\_\_\_\_\_\_\* reduction)** |
| Structural Frame,  including columns, girders, trusses |  |  |  |  |  |  |  |
| Bearing Walls |  |  |  |  |  |  |  |
| Exterior |  |  |  |  |  |  |  |
| North |  |  |  |  |  |  |  |
| East |  |  |  |  |  |  |  |
| West |  |  |  |  |  |  |  |
| South |  |  |  |  |  |  |  |
| Interior |  |  |  |  |  |  |  |
| Nonbearing Walls and Partitions  Exterior walls |  |  |  |  |  |  |  |
| North |  |  |  |  |  |  |  |
| East |  |  |  |  |  |  |  |
| West |  |  |  |  |  |  |  |
| South |  |  |  |  |  |  |  |
| Interior walls and partitions |  |  |  |  |  |  |  |
| Floor Construction  Including supporting beams  and joists |  |  |  |  |  |  |  |
| Floor Ceiling Assembly |  |  |  |  |  |  |  |
| Columns Supporting Floors |  |  |  |  |  |  |  |
| Roof Construction, including supporting beams and joists |  |  |  |  |  |  |  |
| Roof Ceiling Assembly |  |  |  |  |  |  |  |
| Columns Supporting Roof |  |  |  |  |  |  |  |
| Shaft Enclosures - Exit |  |  |  |  |  |  |  |
| Shaft Enclosures - Other |  |  |  |  |  |  |  |
| Corridor Separation |  |  |  |  |  |  |  |
| Occupancy/Fire Barrier Separation | |  |  |  |  |  |  |
| Party/Fire Wall Separation |  |  |  |  |  |  |  |
| Smoke Barrier Separation |  |  |  |  |  |  |  |
| Smoke Partition |  |  |  |  |  |  |  |
| Tenant/Dwelling Unit/ Sleeping Unit Separation |  |  |  |  |  |  |  |
| Incidental Use Separation |  |  |  |  |  |  |  |

\* Indicate section number permitting reduction

**PERCENTAGE OF WALL OPENING CALCULATIONS**

|  |  |  |  |
| --- | --- | --- | --- |
| Fire Separation Distance  (Feet) from Property lines | Degree of openings Protection  (Table 705.8) | Allowable area  (%) | Actual shown on plans (%) |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**life safety system REQUIREMENTS**

Emergency Lighting: Select one

Exit Signs: Select one

Fire Alarm: Select one

Smoke Detection Systems: Select one

Carbon Monoxide Detection: Select one

**LIFE SAFETY PLAN REQUIREMENTS**

Life Safety Plan Sheet #: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Fire and/or smoke rated wall locations (Chapter 7)

Assumed and real property line locations (if not on the site plan)

Exterior wall opening area with respect to distance to assumed property lines (705.8)

Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)

Occupant loads for each area

Exit sign locations (1013)

Exit access travel distances (1017)

Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))

Dead end lengths (1020.4)

Clear exit widths for each exit door

Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)

Actual occupant load for each exit door

A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation

Location of doors with panic hardware (1010.1.10)

Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)

Location of doors with electromagnetic egress locks (1010.1.9.9)

Location of doors equipped with hold-open devices

Location of emergency escape windows (1030)

The square footage of each fire area (202)

The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)

Note any code exceptions or table notes that may have been utilized regarding the items above

**accessible dwelling units**

(section 1107)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Unit Classification | Total Units | Accessible Units Required | Accessible Units Provided | Type A Units Required | Type A Units Provided | Type B Units Required | Type B Units Provided | total  accessible Units  provided |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

**accessible parking**

(section 1106)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| lot or parking area | total # of parking spaces | | # of accessible spaces provided | | total # accessible provided |
| required | provided | 96” spaces | 132” spaces |
|
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| total |  |  |  |  |  |

**plumbing fixture requirements**

**(TABLE 2902.1)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| use | | waterclosets | | | urinals | lavatories | | | showers/ tubs | drinking fountains | |
| male | female | unisex | male | female | unisex | regular | accessible |
| space | exist’g |  |  |  |  |  |  |  |  |  |  |
| new |  |  |  |  |  |  |  |  |  |  |
| req’d |  |  |  |  |  |  |  |  |  |  |

**special approvals**

**Special approval:** (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc., describe below)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**ENERGY summary**

**ENERGY REQUIREMENTS:**

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

**Existing building envelope complies with code:** Select one

**Exempt Building:** Select one Provide code or statutory reference:

**Climate Zone:** Select one

**Method of Compliance:** Select one

(If “Other” specify source here)

**THERMAL ENVELOPE** (Prescriptive method only)

**Roof/ceiling Assembly** (each assembly)

Description of assembly: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

U-Value of total assembly: \_\_\_\_\_\_\_\_\_\_\_

R-Value of insulation: \_\_\_\_\_\_\_\_\_\_\_

Skylights in each assembly: \_\_\_\_\_\_\_\_\_\_\_

U-Value of skylight: \_\_\_\_\_\_\_\_\_\_\_

total square footage of skylights in each assembly: \_\_\_\_\_\_\_\_\_\_\_

**Exterior Walls** (each assembly)

Description of assembly: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

U-Value of total assembly: \_\_\_\_\_\_\_\_\_\_\_

R-Value of insulation: \_\_\_\_\_\_\_\_\_\_\_

Openings (windows or doors with glazing)

U-Value of assembly: \_\_\_\_\_\_\_\_\_\_\_

Solar heat gain coefficient: \_\_\_\_\_\_\_\_\_\_\_

projection factor: \_\_\_\_\_\_\_\_\_\_\_

Door R-Values: \_\_\_\_\_\_\_\_\_\_\_

**Walls below grade** (each assembly)

Description of assembly: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

U-Value of total assembly: \_\_\_\_\_\_\_\_\_\_\_

R-Value of insulation: \_\_\_\_\_\_\_\_\_\_\_

**Floors over unconditioned space** (each assembly)

Description of assembly: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

U-Value of total assembly: \_\_\_\_\_\_\_\_\_\_\_

R-Value of insulation: \_\_\_\_\_\_\_\_\_\_\_

**Floors slab on grade**

Description of assembly: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

U-Value of total assembly: \_\_\_\_\_\_\_\_\_\_\_

R-Value of insulation: \_\_\_\_\_\_\_\_\_\_\_

Horizontal/vertical requirement: \_\_\_\_\_\_\_\_\_\_\_

slab heated: \_\_\_\_\_\_\_\_\_\_\_

**2018 APPENDIX B**

**BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS**

**structural design**

**(provide on the STRUCTURAL sheets if applicable)**

**DESIGN LOADS:**

**Importance Factors:** Snow (IS) Select one

Seismic (IE) Select one

**Live Loads:** Roof \_\_\_\_\_\_\_\_\_ psf

Mezzanine \_\_\_\_\_\_\_\_\_ psf

Floor \_\_\_\_\_\_\_\_\_ psf

**Ground Snow Load:** \_\_\_\_\_\_\_\_\_ psf

**Wind Load:** Ultimate Wind Speed \_\_\_\_\_\_\_\_\_ mph (ASCE-7)

Exposure Category Select one

**SEISMIC DESIGN CATEGORY:** Select one

Provide the following Seismic Design Parameters:

**Risk Category** (Table 1604.5) Select one

**Spectral Response Acceleration** SS\_\_\_\_\_\_\_\_\_ %g S1\_\_\_\_\_\_\_\_\_ %g

**Site Classification** (ASCE 7)Select one

Data Source: Select one

**Basic structural system** Select one

**Analysis Procedure:** Select one

**Architectural, Mechanical, Components anchored?** Select one

**Lateral design Control:** Select one

**Soil Bearing Capacities:**

Select one \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ psf

Pile size, type, and capacity \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2018 APPENDIX B**

**BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS**

**MECHANICAL design**

**(provide on the MECHANICAL sheets if applicable)**

**mechanical summary**

**MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT**

**Thermal Zone**

winter dry bulb: \_\_\_\_\_\_\_\_\_\_\_

summer dry bulb: \_\_\_\_\_\_\_\_\_\_\_

**Interior design conditions**

winter dry bulb: \_\_\_\_\_\_\_\_\_\_\_

summer dry bulb: \_\_\_\_\_\_\_\_\_\_\_

relative humidity: \_\_\_\_\_\_\_\_\_\_\_

**Building heating load:** \_\_\_\_\_\_\_\_\_\_\_

**Building cooling load:** \_\_\_\_\_\_\_\_\_\_\_

**Mechanical Spacing Conditioning System**

Unitary

description of unit: \_\_\_\_\_\_\_\_\_\_\_

heating efficiency: \_\_\_\_\_\_\_\_\_\_\_

cooling efficiency: \_\_\_\_\_\_\_\_\_\_\_

size category of unit: \_\_\_\_\_\_\_\_\_\_\_

Boiler

Size category. If oversized, state reason.: \_\_\_\_\_\_\_\_\_\_\_

Chiller

Size category. If oversized, state reason.: \_\_\_\_\_\_\_\_\_\_\_

**List equipment efficiencies:** \_\_\_\_\_\_\_\_\_\_\_

**2018 APPENDIX B**

**BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS**

**ELECTRICAL design**

**(provide on the electrical sheets if applicable)**

**electrical summary**

**ELECTRICAL SYSTEM AND EQUIPMENT**

**Method of Compliance:** Select one

**Lighting schedule** (each fixture type)

lamp type required in fixture

number of lamps in fixture

ballast type used in the fixture

number of ballasts in fixture

total wattage per fixture

total interior wattage specified vs. allowed (whole building or space by space)

total exterior wattage specified vs. allowed

**Additional Efficiency Package Options**

**(When using the 2018 NCECC; not required for ASHRAE 90.1)**

C406.2 More Efficient HVAC Equipment Performance

C406.3 Reduced Lighting Power Density

C406.4 Enhanced Digital Lighting Controls

C406.5 On-Site Renewable Energy

C406.6 Dedicated Outdoor Air System

C406.7 Reduced Energy Use in Service Water Heating