**2012 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 \_\_\_\_\_\_\_\_\_\_\_\_\_

Proposed Use: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

Owned By: [ ]  City/County [ ]  Private [ ]  State

Code Enforcement Jurisdiction: [ ]  City\_\_\_\_\_\_\_\_\_\_\_\_ [ ]  County\_\_\_\_\_\_\_\_\_ [ ]  State

**LEAD DESIGN PROFESSIONAL:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

designer firm name license # telephone # e-mail

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

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

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

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

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

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

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

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

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

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

**2012 EDITION OF NC CODE FOR:** [ ]  New Construction [ ]  Addition [ ]  Upfit

**EXISTING:** [ ]  Reconstruction [ ]  Alteration [ ]  Repair [ ]  Renovation

**CONSTRUCTED:** (date) \_\_\_\_\_\_\_\_\_\_ **ORIGINAL USE(S)** (Ch. 3)**:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **RENOVATED:** (date) \_\_\_\_\_\_\_\_\_\_ **CURRENT USE(S)** (Ch. 3)**:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **PROPOSED USE(S)** (Ch. 3)**:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**BASIC BUILDING DATA**

**Construction Type:** [ ]  I-A [ ]  II-A [ ]  III-A [ ]  IV [ ]  V-A

(check all that apply) [ ]  I-B [ ]  II-B [ ]  III-B [ ]  V-B

**Sprinklers:** [ ]  No [ ]  Partial [ ]  Yes [ ]  NFPA 13 [ ]  NFPA 13R [ ]  NFPA 13D

**Standpipes:** [ ]  No [ ]  Yes Class [ ]  I [ ]  II [ ]  III [ ]  Wet [ ]  Dry

**Fire District:** [ ]  No [ ]  Yes (Primary) **Flood Hazard Area:** [ ]  No [ ]  Yes

**Building Height:** (feet) \_\_\_\_\_\_\_\_

**Gross Building Area:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Floor |  | Existing (sq ft) |  | New (sq ft) |  | RENO/ALTER (SQ.FT) |  | Sub-Total |
| 6th Floor  |  |  |  |  |  |  |  |  |
| 5th Floor  |  |  |  |  |  |  |  |  |
| 4th Floor  |  |  |  |  |  |  |  |  |
| 3rd Floor |  |  |  |  |  |  |  |  |
| 2nd Floor |  |  |  |  |  |  |  |  |
| Mezzanine  |  |  |  |  |  |  |  |  |
| 1st Floor |  |  |  |  |  |  |  |  |
| Basement |  |  |  |  |  |  |  |  |
| total |  |  |  |  |  |  |  |  |

**Allowable area**

**Occupancy:**

Assembly [ ]  A-1 [ ]  A-2 [ ]  A-3 [ ]  A-4 [ ]  A-5

Business [ ]

Educational [ ]

Factory [ ]  F-1 Moderate [ ]  F-2 Low

Hazardous [ ]  H-1 Detonate [ ]  H-2 Deflagrate [ ]  H-3 Combust [ ]  H-4 Health [ ]  H-5 HPM

Institutional [ ]  I-1 [ ]  I-2 [ ]  I-3 [ ]  I-4

I-3 Condition [ ]  1 [ ]  2 [ ]  3 [ ]  4 [ ]  5

Mercantile [ ]

Residential [ ]  R-1 [ ]  R-2 [ ]  R-3 [ ]  R-4

Storage [ ]  S-1 Moderate [ ]  S-2 Low [ ]  High-piled

[ ]  Parking Garage [ ]  Open [ ]  Enclosed [ ]  Repair Garage

Utility and Miscellaneous [ ]

**Accessory Occupancies:**

Assembly [ ]  A-1 [ ]  A-2 [ ]  A-3 [ ]  A-4 [ ]  A-5

Business [ ]

Educational [ ]

Factory [ ]  F-1 Moderate [ ]  F-2 Low

Hazardous [ ]  H-1 Detonate [ ]  H-2 Deflagrate [ ]  H-3 Combust [ ]  H-4 Health [ ]  H-5 HPM

Institutional [ ]  I-1 [ ]  I-2 [ ]  I-3 [ ]  I-4

I-3 Condition [ ]  1 [ ]  2 [ ]  3 [ ]  4 [ ]  5

Mercantile [ ]

Residential [ ]  R-1 [ ]  R-2 [ ]  R-3 [ ]  R-4

Storage [ ]  S-1 Moderate [ ]  S-2 Low [ ]  High-piled

[ ]  Parking Garage [ ]  Open [ ]  Enclosed [ ]  Repair Garage

Utility and Miscellaneous [ ]

**Incidental Uses** (Table 508.2.5)**:**

[ ]  Furnace room where any piece of equipment is over 400,000 Btu per hour input

[ ]  Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower

[ ]  Refrigerant machine room

[ ]  Hydrogen cutoff rooms, not classified as Group H

[ ]  Incinerator rooms

[ ]  Paint shops, not classified as Group H, located in occupancies other than Group F

[ ]  Laboratories and vocational shops, not classified as Group H. located in a Group E or I-2 occupancy

[ ]  Laundry rooms over 100 square feet

[ ]  Group I-3 cells equipped with padded surfaces

[ ]  Group I-2 waste and linen collection rooms

[ ]  Waste and linen collection rooms over 100 square feet

[ ]  Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons, or a lithium-ion capacity of 1,000 pounds used for facility standby power, emergency power or uninterrupted power supplies

[ ]  Rooms containing fire pumps

[ ]  Group I-2 storage rooms over 100 square feet

[ ]  Group I-2 commercial kitchens

[ ]  Group I-2 laundries equal to or less than 100 square feet

[ ]  Group I-2 rooms or spaces that contain fuel-fired heating equipment

**Special Uses:** [ ]  402 [ ]  403 [ ]  404[ ]  405 [ ]  406 [ ]  407 [ ]  408[ ]  409[ ]  410[ ]  411[ ]  412[ ]  413[ ]  414[ ]  415[ ]  416[ ]  417[ ]  418[ ]  419[ ]  420[ ]  421[ ]  422[ ]  423[ ]  424

[ ]  425 [ ]  426 [ ]  427

**Special Provisions:** [ ]  509.2 [ ]  509.3 [ ]  509.4[ ]  509.5 [ ]  509.6 [ ]  509.7 [ ]  509.8 [ ]  509.9

**Mixed Occupancy:** [ ]  No [ ]  Yes Separation: \_\_\_\_\_ Hr. Exception: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[ ]  Incidental Use Separation (508.2.5)

This separation is not exempt as a Non-Separated Use (see exceptions).

[ ]  Non-Separated Use (508.3)

The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

[ ]  Separated Use (508.4) - See below for area calculations

For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

 *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 5035 area | (c)area for frontage increase1 | (d)area for sprinkler increase2 | (e)allowable area or unlimited3 | (f)maximum building area4 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

1 Frontage area increases from Section 506.2 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** The sprinkler increase per Section 506.3 is as follows:

1. Multi-story building Is = 200 percent
2. Single story building Is = 300 percent

3 Unlimited area applicable under conditions of Section 507.

4 Maximum Building Area = total number of stories in the building x E (506.4).

5 The maximum area of open parking garages must comply with Table 406.3.5. The maximum area of air traffic control towers must comply with Table 412.1.2.

**allowable height**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | allowable(Table 503) | increase for sprinklers | shown on plans | code reference |
| Type of Construction | Type \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Type \_\_\_\_\_\_\_\_\_\_ |  |
| Building Height in Feet |  | Feet = H + 20' = \_\_\_\_\_\_ |  |  |
| Building Height in Stories |  | Stories + 1 = \_\_\_\_\_\_\_\_\_ |  |  |

**FIRE PROTECTION REQUIREMENTS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **building element** | **fire separation distance (feet)** | **rating** | **detail #** **and sheet #** | **design # for****rated assembly** | **design # for****rated penetration** | **design # 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 |  |  |  |  |  |  |  |
| Roof Construction Including supporting beams and joists |  |  |  |  |  |  |  |
| Shaft Enclosures - Exit |  |  |  |  |  |  |  |
| Shaft Enclosures - Other  |  |  |  |  |  |  |  |
| Corridor Separation |  |  |  |  |  |  |  |
| Occupancy Separation |  |  |  |  |  |  |  |
| Party/Fire Wall Separation |  |  |  |  |  |  |  |
| Smoke Barrier Separation |  |  |  |  |  |  |  |
| Tenant Separation |  |  |  |  |  |  |  |
| Incidental Use Separation |  |  |  |  |  |  |  |

\* Indicate section number permitting reduction

 **life safety system REQUIREMENTS**

Emergency Lighting: [ ]  No [ ]  Yes

Exit Signs: [ ]  No [ ]  Yes

Fire Alarm: [ ]  No [ ]  Yes

Smoke Detection Systems: [ ]  No [ ]  Yes [ ]  Partial \_\_\_\_\_\_\_

Panic Hardware: [ ]  No [ ]  Yes

**LIFE SAFETY PLAN REQUIREMENTS**

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

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

[ ]  Assumed and real property line locations

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

[ ]  Existing structures within 30’ of the proposed building

[ ]  Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.1)

[ ]  Occupant loads for each area

[ ]  Exit access travel distances (1016)

[ ]  Common path of travel distances (1014.3 & 1028.8)

[ ]  Dead end lengths (1018.4)

[ ]  Clear exit widths for each exit door

[ ]  Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.1)

[ ]  Actual occupant load for each exit door

[ ]  A separate reduced scaled plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation and supporting construction for a fire barrier/fire partition/smoke barrier. (707.5.1, 709.4 &710.4).

[ ]  Location of doors with panic hardware (1008.1.10)

[ ]  Location of doors with delayed egress locks and the amount of delay (1008.1.9.7)

[ ]  Location of doors with electromagnetic egress locks (1008.1.9.8)

[ ]  Location of doors equipped with hold-open devices

[ ]  Location of emergency escape windows (1029)

[ ]  The square footage of each fire area (902)

[ ]  The square footage of each smoke compartment (407.4)

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

|  |  |
| --- | --- |
| Section/Table/Note | Title |
|  |  |
|  |  |

**accessible dwelling units**

(section 1107)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Total Units | Accessible Units Required | Accessible Units Provided | Type A Units Required | Type A Units Provided | Type B Units Required | Type B Units Provided | totalaccessible Unitsprovided |
|  |  |  |  |  |  |  |  |

**accessible parking**

(section 1106)

|  |  |  |  |
| --- | --- | --- | --- |
| lot or parking area | total # of parking spaces | # of accessible spaces provided | total #accessibleprovided |
| required | provided | regular with 5' access aisle | van spaces with |
| 132” access aisle | 8' access aisle |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| total |  |  |  |  |  |  |

**structural design**

**DESIGN LOADS:**

**Importance Factors:** Wind (IW) \_\_\_\_\_\_\_\_\_

 Snow (IS) \_\_\_\_\_\_\_\_\_

 Seismic (IE) \_\_\_\_\_\_\_\_\_

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

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

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

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

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

 Exposure Category \_\_\_\_\_\_\_\_\_

 Wind Base Shears (for MWFRS) Vx = \_\_\_\_\_\_\_\_ Vy = \_\_\_\_\_\_\_\_

**SEISMIC DESIGN CATEGORY:** [ ]  A [ ]  B [ ]  C [ ]  D

Provide the following Seismic Design Parameters:

**Occupancy Category** (Table 1604.5) [ ]  I [ ]  II [ ]  III [ ]  IV

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

**Site Classification** (Table 1613.5.2)[ ]  A [ ]  B [ ]  C [ ]  D [ ]  E [ ]  F

Data Source: [ ]  Field Test[ ]  Presumptive[ ]  Historical Data

**Basic structural system** (check one)

[ ]  Bearing Wall [ ]  Dual w/Special Moment Frame

[ ]  Building Frame [ ]  Dual w/Intermediate R/C or Special Steel

[ ]  Moment Frame [ ]  Inverted Pendulum

**Seismic base shear:** VX = \_\_\_\_\_\_\_\_\_ VY = \_\_\_\_\_\_\_\_\_

**Analysis Procedure:** [ ]  Simplified [ ]  Equivalent Lateral Force [ ]  Dynamic

**Architectural, Mechanical, Components anchored?** [ ]  Yes [ ]  No

**Lateral design Control:** Earthquake [ ]  Wind [ ]

**Soil Bearing Capacities:**

Field Test (provide copy of test report) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ psf

Presumptive Bearing capacity \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ psf

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

**SPECIAL INSPECTIONS REQUIRED:** [ ]  Yes[ ]  No

**plumbing fixture requirements**

**(TABLE 2902.1)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| use  | waterclosets | urinals | lavatories | showers/ tubs | drinking fountains |
| male | female | male | female | Regular | Accessible |
| space | existing |  |  |  |  |  |  |  |  |
| new |  |  |  |  |  |  |  |  |
| required |  |  |  |  |  |  |  |  |

**special approvals**

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

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

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

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

**ENERGY summary**

**ENERGY REQUIREMENTS:**

The following data shall be considered minimum and any special attribute required to meet the **North Carolina Energy Conservation 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.

**Climate Zone:** [ ]  3 [ ]  4 [ ]  5

**Method of Compliance:**

[ ]  Prescriptive (Energy Code)

[ ]  Performance (Energy Code)

[ ]  Prescriptive (ASHRAE 90.1)

[ ]  Performance (ASHRAE 90.1)

**THERMAL ENVELOPE**

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

**Section 502.4.3 Sealing of Building Envelope [**Indicate where details are in the set**]**

[ ]  Joint around fenestration and door frames

[ ]  Junction between walls and foundations, walls at building corners, walls and structural floors

 or roofs, walls and roof or wall panels.

[ ]  Openings at penetrations of utility services through roofs, walls, and floors including but not

 limited to electrical, plumbing, mechanical, security and communications.

[ ]  Site-built fenestration and doors.

[ ]  Joints, seams and penetrations of air barrier system.

[ ]  Other openings in the building envelope.

**Samples of construction details are available in Appendix 2.1**

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

**electrical summary**

**ELECTRICAL SYSTEM AND EQUIPMENT**

**Method of Compliance:**

Energy Code: [ ]  Prescriptive [ ]  Performance

 ASHRAE 90.1: [ ]  Prescriptive [ ]  Performance

**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 Prescriptive Compliance**

 [ ]  506.2.1 More Efficient Mechanical Equipment

 [ ]  506.2.2 Reduced Lighting Power Density

[ ]  506.2.3 Energy Recovery Ventilation Systems

[ ]  506.2.4 Higher Efficiency Service Water Heating

[ ]  506.2.5 On-Site Supply of Renewable Energy

[ ]  506.2.6 Automatic Daylighting Control Systems