LOUISIANA STATE UNIFORM CONSTRUCTION CODE PLAN REVIEW CHECKLIST for structures excluding one-and-two family dwellings

The Office of the State Fire Marshal, Division of Code Enforcement and Building Safety, may review plans of structures excluding one-and-two family dwellings for compliance with the applicable requirements of the Louisiana State Uniform Construction Code (LSUCC) on behalf of parishes or municipalities requesting assistance. Plans and specifications for structures located within a parish or municipality that has requested this office to provide this service will be required to contain additional information for review. The information outlined in this document represents the minimum criteria necessary for this office to determine compliance with the LSUCC. Please note that this list is not comprehensive or all-inclusive and does not address all aspects of every structure.

In order to ensure that the proposed projects can be expeditiously reviewed, the requirements of the LSUCC should be addressed in the documents submitted for review. Applicable codes for commercial structures are as follows:

- 2015 International Building Code (IBC), (excluding Chapters 1, 11, and 27);
- 2015 International Existing Building Code (IEBC), (excluding Chapter 1);
- 2015 International Mechanical Code (IMC);
- 2015 International Plumbing Code (IPC);
- 2015 International Fuel Gas Code (IFGC);
- 2014 National Electric Code (NEC).

Drawings and specifications shall also document compliance with the Louisiana Revised Statutes (LRS, see Fire Marshal's Act on our web site at <u>www.dps.state.la.us/sfm</u>) (Also see Uniform Construction Codes and Amendments effective 02/01/2018 at <u>http://lsucc.dps.louisiana.gov/codes.html</u>), the Life Safety Code (NFPA 101) and all promulgated National Fire Codes, the 2010 Americans with Disabilities Act - Architectural Barriers Act (see ADA-ABA, under Codes/Rules/Laws on our web site), the Fair Housing Act, the Commercial Building Energy Conservation Code, (L.R.S. 40:1730.41 through 1730.48), the Architects Licensing Law, (L.R.S. 37:155), the Engineers/Land Surveyors Licensing Law (L.R.S. 37:696(B) & LAC 46:LXI.2701), and the Louisiana State Sanitary Code (LAC Title 51, as may be applicable, see "PLUMBING INFORMATION" below).

The applicable general information contained in this checklist should be clearly identified on the drawings and/or specifications, or provided in the form of an attachment to the contract documents. An attachment is acceptable as long as it is part of the official construction documentation. Failure to provide this information may delay the review of the project or cause it to be rejected for lack of significant information. Additional information and/or drawings are never discouraged and may be necessary to describe complex or unique conditions contained in the project. Where the nature of the work is determined by the local building official to be such that review for compliance with the LSUCC by this office will not be necessary, provide written documentation from the building official to indicate that the required review will be performed by him or her.

As an aid to streamline our architectural plan review process, we ask that you complete this checklist, and attach it to your Plan Review Application. Your help, up front, will facilitate a complete submittal package, shorten our review time, and help us to get your project reviewed and returned sooner. Please verify that each item below is: A. in your submittal, B. correct, and C. is coordinated within the submittal. Thank you for your help, in completing and coordinating the items in this checklist.

REVIEW APPLICATION, CHECKLIST, FEE & DOCUMENTATION

- Completed Plan Review Application form;
- This completed checklist;
- One set of drawings (and specifications, if separate) stamped by the architect or civil engineer (Professional of Record, (POR)) preparing the documents when applicable. Drawings shall be legible;
- Provide a brief description of how the building is proposed to be used;
- Include all existing documentation, if applicable (inspection report(s), equivalency determination letter(s), prior review letter(s), etc.).

SUGGESTED DRAWINGS AND SPECIFICATIONSFOR NEW CONSTRUCTION AND ADDITIONS

COVER SHEET INFORMATION

Identify the proposed occupancy classification(s) [IBC Chapter 3];

- Where the building contains multiple occupancy classifications, (not classified as "Accessory" to the main occupancy), indicate whether it's designed as "Separated Occupancies" or "Non-separated Occupancies" [IBC Section 508];
- ____ Identify any "Accessory Occupancies" [IBC Section 508.2] (other occupancy types less than 10% of the main occupancy), and any "Incidental Use Areas" [IBC Table 509];
 - ____ Identify if any "Special Detailed Requirements" based on use and occupancy apply [IBC Chapter 4];
- _ Identify the new construction type (and existing if an addition) [IBC Table 602 (and IEBC Chapter 11 if an addition)];
- Indicate the gross square footage of each floor, including any covered open areas that are subject to occupancy. If the project is an addition, identify the existing building area separately [IBC Section 503 and IEBC Section 1102]
- Document compliance with the allowable height and building area limitations [IBC Chapter 5]. Provide calculations if area modifications are used [IBC Section 506]
- Identify any Fire Protection Systems that are to be provided [IBC Chapter 9]:
 - Automatic sprinkler system type and extent; [IBC Section 903]
 - Alternative extinguishing systems; [IBC Section 904]
 - _____ Standpipe system; [IBC Section 905]
 - Portable fire extinguisher size, type and locations; [IBC Section 906 & NFPA 10]
 - Automatic or manual fire alarm system and extent; [IBC Section 907]
 - _____ Other fire protection / suppression systems.

Structural Design Data: (May also be indicated on the structural drawings)

Design loads must be included within the construction documents in a manner such that the design loads are clear for all parts of the structure [IBC Section 1603]. This information is required on ALL projects regardless of the involvement of a registered design professional.

Design Loads:

Indicate the load values used in the design of the structural components, as applicable:

- _____ Floor Live load; [IBC Table 1607.1]
- Floor Live loads above the first floor; [IBC Table 1607.1]
- Corridor Live loads; [IBC Table 1607.1]
- Roof Live load; [Table 1607.1]
- Roof (ground) snow load; [IBC Figure 1608.2]

Wind Design Data:

Indicate the following:

- Ultimate Design Wind Speed, Vult (3-second gust) for the site location [IBC Figures 1609.3(1), (2) or (3).];
- Nominal Design Wind Speed, *Vasd* for the site location [IBC Table 1609.3.1];
- Risk Category [IBC Table 1604.5 or ASCE 7-10 Table 1.5-1];
- Wind Exposure Category [IBC Section 1609.4.3] and applicable governing wind direction;
 - Applicable Internal Pressure Coefficient [ASCE 7-10 Table 26.11-1];
- _____ Indicate the design wind pressures in terms of psf used for the design of exterior Component and Cladding materials.
- Indicate the design method used to determine the wind loads (Take note of the specific limitations of each):
 - Conventional Light-Frame Construction provisions of IBC Section 2308, (limited applicability),
 - ASCE 7-10 Directional procedure for buildings, [ASCE 7-10 Chapter 27]
 - ASCE 7-10 Envelope procedure, [ASCE 7-10 Chapter 28]
 - ASCE 7-10 Directional procedure for building appurtenances and other structures, [ASCE 7-10 Chapter 29]
 - ASCE 7-10 Wind Tunnel Procedure for all buildings and other structures, [ASCE 7-10 Chapter 31]
 - _____ AF&PA Wood Frame Construction Manual, (limited applicability),
 - ____ SSTD-10, (limited applicability),
 - _____ Other methods or manuals as allowed or required by the code for specific building construction methods.

Earthquake Design Data:

The following shall be shown regardless of whether seismic loads govern the design of the lateral-force-resisting system of the building: [IBC Sections 1603.1.5 and 1613]

- ____ Risk category [IBC Table 1604.5];
- _____ Seismic importance factor, *le* [ASCE 7-10 Section 11.5];
- Mapped spectral response accelerations, Ss and SI, [IBC Section 1613.3];
- _____ Site class [IBC Section 1613.3.2 and ASCE 7-10 Chapter 20];
- _____ Design spectral response acceleration parameters, SS and SDI, [IBC Section 1613.3.4];
- _____ Seismic design category [IBC Tables 1613.3.5(1) & 1613.3.5(2) Highest of the two];
- Identify the basic seismic-force-resisting system(s) [ASCE 7-10 Section 12.2 or Section 12.14.4];
- Indicate the design base shear [ASCE 7-10 Section 12.8.1 or Section 12.14.8.1];
- _____ Seismic response coefficient(s), Cs [ASCE 7-10 Table 12.2-1];
- _____ Response modification factor(s), *R* [ASCE 7-10 Table 12.2-1];
- _____ Analysis procedure used [ASCE 7-10 Section 12.6 or Section 12.14];

Flood Design Data:

Indicate the elevation of the lowest floor of the structure and grade elevation [IBC Section 1612];

Identify the flood hazard zone, including feet of water in the zone, where indicated on the FIRM maps;

- Indicate the Base Flood Elevation, BFE, of the building [IBC Section 1612.2];
- Indicate the Design Flood Elevation, DFE, of the building [IBC Section 1612.3.1];
- Indicate the elevation to which the building will be dry flood-proofed (*not subject to high-wave velocity action*) [IBC Section 1612.5.1.1.3];

Indicate the proposed elevation of the bottom of the lowest horizontal structural member of the lowest floor, including basement, (*not subject to high-wave velocity action*) [IBC Section 1612.5.1.1.1];

In <u>ALL</u> Flood Hazard Zones, (A, B, C, D, M, N, P, E, V, and X including modifiers in each designation), the following documentation shall be prepared and sealed by a registered design professional. (Surveyor, Architect, or Civil Engineer)

Note: FEMA Form 81-31, *Elevation Certificate*, and FEMA Form 81-65, *Floodproofing Certification*, recommended for this use in the IBC *Commentary* are available at http://www.fema.gov/pdf/nfip/elvcert.pdf and http://www.fema.gov/pdf/nfip/

For construction in an area NOT subject to high-velocity wave action (All zones except V);

Construction documents shall include a statement to indicate that the design will provide for equalization of hydrostatic flood forces in accordance with Section 2.6.2.2 of ASCE 24 if fully enclosed areas below the design flood elevation are provided and do not meet the minimum requirements in Section 2.6.2.1 of ASCE 24. For dry floodproofed nonresidential buildings, construction documents shall include a statement that the dry floodproofing is designed in accordance with ASCE 24.

For construction located in an area subject to high-velocity wave action (Zones V, VO, VE or V1-30.);

Construction documents shall indicate the elevation of the lowest horizontal structural member and shall include a statement that the building is designed in accordance with ASCE 24, including that the pile or column foundation and building or structure to be attached thereto is designed to be anchored to resist flotation, collapse and lateral movement due to the effects of wind and flood loads acting simultaneously on all building components, and other load requirements of Chapter 16.

In designs for required breakaway walls to resist a nominal load of less than 10 psf or more than 20 psf, construction documents shall include a statement that the breakaway wall is designed in accordance with ASCE 24.

SITE PLAN INFORMATION

Provide a site plan drawn to a scale indicated on the plan and in accordance with an accurate boundary line survey. Plan should indicate as a minimum:

____ Distances of the proposed building from the property lines (when the building stands alone on the property);

- ____ Distances from "Assumed property lines" (where the building stands with other buildings on the same site.) [IBC Section 503.1.2];
- Identify adjacent buildings and structures and indicate their distances from the subject building. Indicate any potentially hazardous uses (Storage, Industrial occupancies);
- Adjacent roads, drives, alleys, easements or other public ways;
- Parking areas, including parking layouts, features of accessibility, fence and gate locations;

- Design flood elevation, proposed finished floor elevations of the lowest floor and of the lowest finished floor if different, proposed finished grade elevations;
- Flood zone established for the specific site;
- Location of utilities, (water, gas sewer, electrical, sprinkler water, etc.):
- Indicate topographic features of the site.

FOUNDATION PLAN INFORMATION

Provide a foundation plan drawn to the scale indicated on the plan, dimensioned, and keyed to the floor plan(s). Indicate the design method / manual used for the building foundation / slab. Take note of the specific limitations of each:

- IBC Chapter 18 (may be used in areas not subject to wave action);
- ASCE 24 (Flood resistant design standard);
- Other standards or references as allowed, or required, by the code for specific building foundation types.

Identify soil types in the foundation area and the design bearing capacity used for the foundation design. Provide test reports where required [IBC Section 1803];

Plan should indicate as a minimum:

- Foundation types, locations, sizes, depths, shapes, thicknesses, and materials (piers, piles, footings, walls, slabs, etc);
- Specifications for the type, mix ratio, and minimum compressive strength of concrete (where applicable) [IBC Chapter 19];
- Locations of air entrained concrete (where required) [IBC Sections 1904.2 and Table 1904.2];
- Reinforcing details, specified strength or grade, placement and sizes;
- Imbedded anchoring locations, size and depth [IBC Sections 1908 and 1909];
- Slab layout for recesses, void, and other irregularities;
- Document the elevation of the lowest occupied floor of the structure with respect to grade.

FLOOR PLAN INFORMATION

Provide floor plan(s) drawn to a scale indicated on the plan and dimensioned. Plan(s) should indicate as a minimum:

- Room names and/or uses;
- Door and Window locations;
- Clearly indicate the type and locations of any required fire resistance rated or smoke rated construction used in the project. (See Fire-Resistance Ratings, Fire Walls, Fire Barriers, Fire Partitions, Smoke Barriers, Smoke Partitions, etc. [IBC Table 601 and Chapter 7]):
 - Building Element protection required by the Construction Type [IBC Table 601]
 - Exterior wall construction [Table 602] including opening protection [IBC Section 705 and Table 705.8]
 - Incidental Use Area protection [IBC Table 509]
 - Occupancy Separations (if Separated Occupancies) [IBC Table 508.4]
 - Corridors [IBC Section 1020 and Table 1020.1]
 - Egress Balconies [Section 1021]
 - Interior Exit Stairway and Ramps [IBC Section 1023]
 - Exit Passageways [IBC Section 1024]
 - Horizontal Exits [IBC Section 1026]
 - Exterior Exit Stairways and Ramps [Section 1027]
 - Fire Wall separations [IBC Section 706 and IBC Table 706.4]
 - Fire Barriers and Fire Area Separations [IBC Section 707 and IBC Table 707.3.10]
 - Fire Partitions [IBC Section 708]
 - Smoke Barriers and Smoke Partitions [IBC Sections 709 and 710]
 - Horizontal Assemblies [Section 711]
 - Vertical Openings and Shafts [IBC Section 712 and 713]
 - Other conditions that may require protection
 - Identify the listed tested assemblies, from an approved testing agency, used to achieve the fire resistance rating of the proposed construction (UL, ETL, FM, GA, WP, WH, etc.) including joints in the assemblies. [IBC Section 714,715 & 716]
 - Identify key features of the Means of Egress: (Chapter 10)
 - Indicate occupant loads for each room in Assembly (A1, A2, A3, A4, and A5) occupancies: [IBC Table 1004.1.2] Indicate stair, corridor, aisle, and doorway widths in all occupancies: [IBC Section 1005]
- Indicate locations of structural elements, including shear walls used to transfer lateral forces.

SCHEDULES and DETAILS

Provide sufficient information to identify features indicated in the construction documents:

- Schedules to indicate door / frame and window opening sizes configurations, types, materials, fire resistance ratings and door operating hardware;
- Where the project is located in a wind borne debris region, (ultimate design wind speed Vult = 130 mph or greater within 1 mile of the coastal mean high water line **or** ultimate design wind speed Vult = 140 mph or greater), provide details, specifications and/or schedules to identify the method of opening protection used, and its anchorage to the building. [IBC Sections 1609.1.2 and 1609.2]
- _____ Identify the interior finishes used in each room of the project:
- Walls and Ceilings [IBC Table803.11] Floors [IBC Section 804]

STRUCTURAL FRAMING INFORMATION

Provide framing plan(s) drawn to a scale indicated on the plan, dimensioned, and keyed to the floor plan(s). Plan(s) should indicate as a minimum:

- _____ Floor and roof framing plans (as applicable);
- Identify structural members Materials used, Sizes, and spacing;
- Identify the Main Wind Force Resisting System. Provide sufficient detail to demonstrate that the structure has been designed to withstand the indicated design loads;
- Locate lateral bracing, ties, clips, sheathing or other elements and materials used to reinforce or otherwise provide stability to the structure and provide continuous path for loads from roof to grade.
- _____ Provide anchorage details. Indicate types, locations, sizes and spacing;
- Design loads must be included within the construction documents in a manner such that the design loads are clear for all parts of the structure [IBC Section 1603]. (See also COVER SHEET INFORMATION above)

EXTERIOR ELEVATION INFORMATION

- Provide elevations of each side of the building. Plans should indicate as a minimum:
- Vertical distance from grade to the average height of the highest roof surface [IBC Sections 502 and 504]; Opening locations;
- For 130 MPH (Vult 3 Second Gust) wind zones and above, documents should clearly identify methods used for opening protection;
- Provide details and specifications to indicate that components and cladding (including the roof deck and roof coverings) are designed and are to be installed to withstand the pressures determined in accordance with ASCE 7-10.
- _____ Identify the lateral bracing system.

BUILDING AND WALL SECTIONS

- _____ Wall sections of each bearing wall condition, interior and exterior, to indicate a continuous load path through the structure from the roof to the foundation at each condition;
- ____ Drawings should clearly indicate the components required to resist wind forces and to achieve the required "continuous load path" from roof peak to foundation anchorage.
- Provide details and specifications to indicate that components and cladding are designed and installed to with the pressure determined in constrained with ASCE 7.10. (See also EXTERIOR ELE) (ATION
- withstand the pressures determined in accordance with ASCE 7-10. (See also EXTERIOR ELEVATION INFORMATION above)
- Identify structural members;
- ____ Identify materials;
- Provide dimensions;
- Specify anchorage/connector types used and indicate their proposed locations and spacing. (See also STRUCTURAL FRAMING INFORMATION above)

MECHANICAL INFORMATION

- Provide mechanical drawings to indicate as a minimum:
- ____ Equipment types and locations;
- Ductwork and piping sizes, CFM, and locations;
- _____ Mechanical ventilation air balance design calculations;
- Return, supply, exhaust and outdoor air supply in accordance with IMC 403.1, 403.2, 403.2.1, 403.3 and Table 403.3.1.1 requirements; (see also IBC Section 1020.5)
- _____ Electrical and/or fuel gas requirements of proposed equipment;
- _____ Identify the devices used to protect duct penetrations and air transfer openings in assemblies required to be protected [IBC Section 717];
- _____ Smoke control system details (where required) [IBC Section 909 and IMC Chapter 5];

Commercial hood and duct system details (where applicable) [IBC Section 904 and IMC Chapter 5]. (See also checklist available on our website at www.dps.state.la.us/sfm)

PLUMBING INFORMATION

- Plans should indicate as a
- minimum:
- Fixture types and locations:
- Usable Floor Space (IPC 403.1);
- Water supply and distribution, Specify source of water supply;
- Identifypiping materials, fittings, and valves;
- Backflow protection of potable water; Sanitary drainage and cleanouts;
- Specify method of sewage disposal;
- Grease trap/interceptor type, size and location (where applicable);
- Vent sizes and locations;
- Plumbing riser and dimensioned Plumbing Layout Diagram(s);
- Storm/Roof Drainage;
- Water heating equipment size and type;
- Identify the materials and methods of construction used to protect through penetrations and membrane penetrations of horizontal assemblies and fire-resistance-rated wall assemblies [IBC Section 714]

In accordance with the Public Health-Sanitary Code, (LAC Title 51), Part I, Section 119, certain activities require submission of plans to the STATE HEALTH OFFICER, who must approve the plans and issue a permit prior to the initiation of the activity. Refer to the chart below to determine if submission to the DHH - Office of Public Health is required. Plans for proposed construction, renovation, or use of the following buildings and establishments shall be submitted to the state health officer for review and approval before construction. (See LAC Title 51 Part 1, Section 119:

http://doa.louisiana.gov/osr/lac/51v01/51.doc)

§119. **Plans and Permits**

A. [formerly paragraph 1:009-1] Certain activities require submission of plans to the state health officer, who must approve the plans and issue a permit prior to the initiation of the activity. This includes but is not limited to the operation, construction or renovation of facilities. For details, see the appropriate Parts of this Code.

B. [formerly paragraph 1:009-2] In those instances in which such activities, for which submission of plans prior to initiation of the activity is required, are found to exist, and no such submittal of plans has been made, the state health officer shall, upon submittal of the required plans and determination of compliance of such activity with this code, offer no objection to the existence of such activity. This shall not be construed to limit in any way the state health officer's authority to suspend, rescind, revoke, or reissue such position of no objection, just as with any other approval or permit, as per §119.C of this Part. The burden of proof of compliance shall be on the applicant.

C. [formerly paragraph 1:010] The state health officer can suspend, rescind, revoke, and reissue permits or approvals, or issue new permits or approvals as provided in this code. The addresses to which requests shall be submitted are set forth in the appropriate Parts of this code.

1. [formerly 1:010-1] If any permit requiring a fee is paid for by a check that is returned for insufficient funds, closed account, stop payment, or for any other reason, the permit holder must reimburse the appropriate agency within 30 days of notification that their check has been returned. Failure to comply with this Paragraph shall be sufficient grounds for the suspension, rescission, or revocation of said permit.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:4 and R.S. 40:5(3)(7)(17)(19)(20)(21).

Manufacturing, Processing, Packing and Holding of Food, Drugs and Cosmetics (Part VI)	Food or Drug Manufacturers., Distributors, Wholesalers, or Warehouses; Food Salvaging Operations, Bottled Drinking Water Processor/Packagers (109.B) Bakeries and Manufacturing Confectioneries (505.A.1) Soft Drink Manufacturing (1105.A) Cold Storage and Ice Plants (1303.A)
Milk, Milk Products, and Manufactured	All dairies from which milk or milk products are offered for sale (301.A)
Milk Products (Part VII)	All milk and milk products plants from which milk or milk products are offered for sale (501.A)
Frozen Desserts (Part VIII)	Plants for the production of frozen desserts (127.A)
	Depots for Mobile Frozen Dessert Units (141)
Marine and Fresh Water Animal Food Products (Part IX)	Establishments for the cleaning, shucking, picking, peeling, or packing of any marine or fresh-water animal food product (313.A)

Game Birdand Small Animal Slaughter	Every slaughter house and meat packing plant (113.B)
and Processing (Part X)	
Animals and Animal Diseases; Rendering of Animals (Part XI)	Rendering plant (301.B)
Water Supplies (Part XII)	Public water systems/supplies(105.B)
Sewage Disposal (Part XIII)	Community sewerage system, or make a modification of an existing system which changes the system's capacity, effluent quality, point of discharge, hydraulic or contaminant loadings, or operation of the component units of the system (501.A) Individual sewerage system of any kind (701.A)
Travel Trailers and	Travel trailer parks (LSPC – 1507)
Mobile/Manufactured Homes (PartXIV – Chapters 15 &16)	Mobile/Manufactured home parks (LSPC – 1607)
Hotels, Lodging Houses, Boarding Houses (Part XV)	Hotel, lodging house or boarding house (105.A)
Campsites (Part XVI)	Campsite (301.A)
PublicBuildings, Schools, and Other Institutions (PartXVII)	Facilities for any state agency, or any institutional buildings. Institutions include, but are not limited to schools, kindergartens, nursery schools, trade schools, colleges, universities, hospitals, nursing homes, jails, and mortuaries. (103.A)
Jails, Prisons and Other Institutions of Detention or Incarceration (Part XVIII)	Jails, prisons or other institutions of detention or incarceration (101.A)
Hospitals, Ambulatory Surgical Centers, Renal Dialysis Centers(Part XIX)	Hospital, ambulatory surgical center, or renal dialysis center (103.A)
Nursing Homes (Part XX)	Nursing home (103.A)
Day Care Centers and Residential Facilities (Part XXI)	Child and adult day care centers (103.A) Residential Facilities include, but are not limited to group homes, community homes, maternity homes, juvenile detention centers, emergency shelters, halfway homes and schools for the mentally retarded.
Retail Food Establishments (Part XXIII)	Food establishment or retail food store/market (307.A) Itinerant food establishments or itinerant retail food stores/markets (4131.A) Mobile Food Establishments/Depot (4509.A & 4523.B)
Swimming Pools and Natural or Semi- Artificial Swimming or Bathing Places (Part XXIV)	Swimming pool, water park or water slide public or private, including, but not limited to, those owned by clubs, private schools, apartment houses, and condominiums.(103.A.b)
Burial, Transportation, Disinterment or Other Disposition of Dead Human Bodies (Part XXVI)	Funeral establishments (105.A)

If the proposed project meets one or more of the descriptions above, contact a sanitarian or an engineer at the appropriate Department of Public Health regional office to inquire where plans and specifications are to be submitted. See http://www.dhh.la.gov/index.cfm/directory/category/233 for a listing of offices and contact information.

FUEL GAS INFORMATION

- Plans should indicate as a minimum:
- Fuel Gas type;
 - Pipe sizes, entrance location(s), controls;
- Equipment and appliance locations;
- Schedules of equipment and appliance demands;
- Required clearances to combustible materials;
- Combustion, Ventilation, and Dilution air requirements, locations and details;
- Chimney and vent sizes, locations, and details;
- Identify the materials and methods of construction used to protect through penetrations and membrane penetrations of horizontal assemblies and fire-resistance-rated wall assemblies [IBC Section 714]

ELECTRICAL INFORMATION

- Plans should indicate as a minimum:
- Receptacle and Lighting locations with circuits identified and symbol legends;
- GFCI locations;
- Exit Signage and Emergency Lighting locations [IBC Sections 1013 and 1008];
- Equipment and Fixture schedules;
- Service Entrance Feeder riser diagrams;
- Indicate Meter type and location;
- Transformer Ground fault calculations;
- Panelboard ratings & locations;
- Balanced panel load schedules in amps and KVA;
- Size and ratings of all overcurrent protection devices;
- Specify all conductor sizes in accordance with NEC 215.2, 215.5, 220.3 and annex H 80.21(a)(b)(c) requirements.
- Identify the materials and methods of construction used to protect through penetrations and membrane penetrations of horizontal assemblies and fire-resistance-rated wall assemblies [IBC Section 714]

SUGGESTED DRAWINGS AND SPECIFICATIONSFOR RENOVATION AND MAJOR REPAIR PROJECTS

COVER SHEET INFORMATION

- Indicate the classification of work [IEBC Chapter 5]
- Repairs [IEBC Chapter 6];
- Alteration Level 1 [IEBC Chapter 7];
- Alteration Level 2 [IEBC Chapters 7 and 8];
- Alteration Level 3 [IEBC Chapters 7, 8, and 9];
- Change of Occupancy [IEBC Chapter 10];
 - Identify the previous occupancy classification;
 - Additions (Refer to NEW CONSTRUCTION AND ADDITIONS above);
- Historic Buildings [IEBC Section 408 and Chapter 12]:
- Relocated Buildings [IEBC Chapter 13].
- Identify the proposed occupancy classification(s) [IBC Chapter 3];
- Where multiple occupancy classes (not classified as "Accessory" to the main occupancy), are included, indicate whether designed as separated or nonseparated occupancies [IBC Section 508];
- Identify any "Accessory Occupancies" [IBC Section 508.2]; (other occupancy types less than 10% of the area of the floor.)
- Indicate any "Special Detailed Requirements" [IBC Chapter 4];
- Identify the new construction type (and Existing, if different) [IBC Section 602];
- Indicate the gross square footage of the proposed work on each floor, including any covered open areas that are subject to occupancy. In addition, indicate the gross area of each floor of the existing building [IBC Section 503];
- Document compliance with the allowable height and building area limitations [IBC Chapter 5]. Provide calculations if area modifications are used [IBC Section 506];
 - Identify existing and new Fire Protection Systems provided within the building [IBC Chapter 9]: **IBC Chapter 9**
 - Automatic sprinkler system type and extent; [IBC Section 903];
 - Alternative extinguishing systems; [IBC Section 904]:
 - Standpipe system: [IBC Section 905]:
 - Portable fire extinguisher size, type and locations; [IBC Section 906];
 - Automatic or manual fire alarm system and extent; [IBC Section 907];
 - Other fire protection / suppression systems provided.
 - Indicate the height of the existing building [IBC Sections 504 and 505];
- Structural Design Data:
 - Where applicable, provide the same documents as required for new construction, above.
- Flood Design Data: [IBC Section 1612];
 - If Substantial Improvement, (cost equals or exceeds 50% of market value of the structure), provide the same documents as required for new construction, above.

FLOOR PLAN INFORMATION

- Provide floor plan(s) of the entire floor(s) where the project is located AND a floor plan of each floor level of the project drawn to a scale indicated. Plan(s) should indicate as a minimum:
- Location and extent of the work of the project;
- Identify the occupancy classes of any adjacent tenants in the same building;
- Identify fire and smoke barriers within the building, regardless of their involvement in the project;
- Room names and/or uses;
- Door and Window locations;
- Clearly indicate any required fire resistance rated or smoke rated construction used in the project;
- Incidental Use protection [IBC Table 509];
- Occupancy Separations [IBC Table 508.4];
- Building Element protection required by the Construction Type [IBC Table 601];
- Exterior walls [Table 602] including opening protection [IBC Section 705 and Table 705.8];
- Corridors [IBC Section 1020 and Table 1020.1];
- Vertical Openings and Shafts [IBC Sections 712 and 713];
- Interior Exit Stairway and Ramps [IBC Section 1023]
- Exit Passageways [IBC Section 1024]
- Fire Wall separations [IBC Section 706 and IBC Table 706.4];
- Fire Barriers and Fire Area Separations [IBC Section 707 and IBC Table 707.3.10]
- Fire Partitions [IBC Section 708];
- Smoke Barriers and Smoke Partitions [IBC Sections 709 and 710]
- Any other condition that may require fire or smoke resistance from requirements throughout the code;
- Identify the listed tested assemblies, from an approved testing agency, used to achieve the fire resistance rating of the proposed construction (UL, ETL, FM, GA, WP, WH, etc.) including joints in the assemblies. [IBC Section 715]; Identify key features of the Means of Egress: (Chapter 10)
- Indicate occupant loads for each room in Assembly (A1, A2, A3, A4, and A5) occupancies: [IBC Table 1004.1.2]; Indicate stair, corridor, aisle, and doorway widths in all occupancies; [IBC Section 1005]:
- Identify lighting, and emergency lighting locations [IBC Section 1008], and Exit Signage locations [IBC Section 1013]; Indicate locations of structural elements, including shear walls used to transfer lateral forces;
- Provide sufficient detail in order to demonstrate that the structure has been designed to withstand the indicated design loads.

SCHEDULES and DETAILS

- Provide information to identify features indicated in the construction documents:
- Schedules to indicate door / frame and window opening sizes configurations, types, materials, fire resistance ratings and door operating hardware;
- As appropriate, where the project is located in a wind borne debris region, provide details, specifications and/or schedules to identify the method of opening protection used, and its anchorage to the building, if appropriate, IIBC Sections 1609.1.2 and 1609.2]
- Identify the interior finishes used in each room of the project:
- Walls and Ceilings [IBC Table 803.11]
- Floors [IBC Section 804]

ADDITIONAL INFORMATION:

Where applicable, provide the same documents as required for new construction, above. Include structural framing plans, exterior elevations, building and wall sections, mechanical, plumbing, fuel gas, and/or electrical drawings as necessary to document the scope of the work.