CONSTRUCTION DOCUMENTS CHECKLIST

for the

2012 Michigan Building Code Including Building Permit Application Checklist

This checklist is a convenient reference to the 2012 Michigan Building Code. The checklist summarizes the minimum data required by the MBC to be on construction documents for the examination and approval of a building permit application for non-residential and multi-family projects. Depending on the type and complexity of the project, additional information not indicated on this checklist may be required by the MBC or the Building Official [105.3(7).,107.1] Applicants are encouraged to indicate if the required data is applicable to the project, or not applicable, and attach a copy of the completed checklist to the construction documents. Please contact the local building department for requirements regarding phased construction or tenant finishes. Thank you for taking the time to complete this checklist. Having the necessary information at the beginning of the plan review process will help expedite the issuance of a building permit.

DATE SUBMITTED

| DATE SUI | | |
|------------------------|-------------------|--|
| PROJECT | NAME | |
| PROJECT | | |
| | TRACKING | |
| | ST PREPARI | ED BY |
| REPRESE | | |
| | IATION F | REQUIRED ON THE CONSTRUCTION DOCUMENTS 105.3(4) |
| Provided Dwg / Spec | Not Applicable | |
| | | Indicate the project name and address on the plans if available (105.3.(2); 107.2.1) |
| | | Owner's name & mailing address |
| | | Name of the registered design professional |
| | | Address of registered design professional |
| | | Telephone number of the registered design professional |
| | | Fax number of the registered design professional |
| | | Name, Michigan license number, address, telephone number and fax number of the registered design professional in responsible charge (unless waived by the Building Official) (107.3.4) |
| | | Name of individual to receive review comments |
| | | Address of individual to receive review comments |
| | | Telephone number of individual to receive review comments |
| | | The Michigan licensed Registered Design Professional must provide original signature, seal and date on all sheets of the drawings and specification manual or on the index sheet of the drawings and specification manual only when the index sheet covers all the sheets that make up the drawing set and specification manual (107.1, 107.3,4) |
| | | List codes applicable to project (107.2.1) The MBC or the MBC Section 34, or the Michigan Rehab Code may be used for existing buildings |
| | | List of all proposed deferred submittal documents (107.3.4.1) |
| | | SITE PLANS (107 2.5) |
| | | Identify all existing and proposed construction |
| | | Show property lines, identify building distances from property lines and from other buildings on-site |
| | | Identify all structures to be demolished |
| | | Identify the total number of parking spaces provided |
| | | Identify the total number of accessible parking spaces provided, including van accessible spaces (1106.1, 1106.5) |
| | | Show proposed finish grades, grade floor elevations, street elevations |
| | | Show flood plain elevations and boundaries |
| | | Indicate the occasion of all new and existing utilities including the entrance points into the building and the FDC location |
| | | Show site grading (slope away) of the ground immediately adjacent to the foundation of the building |
| | | Provide complete dimensions, running slope and cross slope of all accessible parking spaces and accessible parking to the accessible entrances (107.2.1, 1104.1) |

| BUILDIN | G PLANS |
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| | Indicate Use Group, Indicate mixed use option if applicable (302.1) |
| | Indicate Type of Construction (602.1) |
| | Indicate the use of all rooms and spaces. Indicate number of occupants on every floor, room and |
| | space. Show method used to determine the occupant load and means of egress requirements (107 |
| | 2.1, 107.2.3 1004.1) Provide Key Plan if needed to identify the location of the proposed work (107.2.1) |
| | Indicate total area of building, number of stories, and provide height and area calculations |
| | including open perimeter & fire suppression increases (501.1, 503.1) |
| | Indicate if a full or limited area Fire Suppression system & Fire Alarm system will be installed and provide deferred submittals. (903; 907; 901.6; 107) |
| | Show location and provide details of all fire and smoke rated assemblies and protection of |
| | penetrations, including permanent markings and identifications. Provide U.L. design number or other approval rating (107.2.1, 701.1, 703.6, 712.1, 713.1) |
| | Show location of portable fire extinguishers (906.1) |
| | Provide details showing the proposed assembly of all walls, floors, roofs and stairs (107.2.1, 107.2.3, 107.2.4) |
| | Show location and hourly rating of all fire doors, fire dampers and fire windows (715.1)(716.1) |
| | Provide details of room finishes including type of materials with flame spread and smoke development ratings indicated for all materials. (801.1)(803)(107.2.1)(2603.1) Documentation for the flame spread and smoke development of all materials must be provided at field inspection |
| | Provide flame spread and smoke development documentation for all foam plastics and details on the foam plastic insulation thermal barriers (107.2.1, 2603.1) |
| | Provide complete dimensions for all rooms and spaces including stairs, aisles, passageways, |
| | corridors, areas around counters, fixtures, all circulation and egress paths, and maneuvering clearance at all doors (107.2.1, 1003.1, 1101.2) |
| | Provide door hardware, door and window details including type, size, material and hourly rating required (107.2.1, 1008.1) |
| | Show masonry sizes, grades, reinforcement, anchorages, loads and compressive strengths, provide masonry fireplace details and clearances. 2101.2, 2101.3(1) thru (9), 2101.3.1) |
| | Provide stairway details with all guard and handrail details (1009) |
| | Show location of all exit signs and means of egress lighting (1006.1, 1011.1) |
| | Show type and thickness of all glazing materials and safety glazing where required (2401.1) |
| | Provide accessibility details (107.2.1; 1101.2) |
| | Provide dimensions and details for all interior accessible routes within the building. Include the maneuvering clearance required at all doors (1104) |
| | Indicate heights, clearances and turning radii along all accessible routes (1104) |
| | Provide plumbing fixture and accessory details (1109) |
| | Provide dimensions and details for all use group requirements. Include features and facilities required to be accessible (1107)(1108)(1109) |
| | Provide signage details including location, wording, size and mounting height (1110) |
| | Show exterior wall details (107.2.1; 107.2.4; 1401.1) |
| | All base, sill, jamb and head flashings |
| | Intersection with dissimilar materials |
| | Corners |
| | End conditions |
| | Control joints |
| | Intersection at roof, eaves, or parapets |
| | Details around openings |
| | Construction space venting |
| | Means of water drainage |
| | Roof overflow drains (P 1105; P 1108) |
| | Water-resistive membrane |

| STRUCTURAL PLANS (107.2.1; 1603.1) |
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| Indicate design loads (1603.1) |
| Roof Live Load (1603.1. 2) |
| Floor Live Load (1603.1.1) |
| Ground Snow Load (1603.1.3) |
| Roof Snow Load (1603.1.3) |
| Wind Design Data (1603.1.4) |
| Earthquake Design Date (1603.1.5) |
| Indicate load bearing value of soils (1603.1.6;1801.2;1803.6 (5) |
| Guard and Handrail (1607.8.1) |
| Indicate any Special Loads (1603.1 8) |
| Show foundation dimensions and details (107.2.1;1601.1;1603.1) |
| List all Design / Construction Standards and material speciation's (107.2.1) |
| Indicate the location, size and cross section of all structural members with dimensions, column |
| centers and offsets (1603.1) |
| Identify lateral resistive system(s) including lateral bracing and transfer and collection systems (1604.4; 1604.9) |
| ELECTRICAL PLANS (106.1.1) |
| Electrical layout (Michigan Part 8 – 80.21) |
| Wattage Schedule (Michigan Part 8 – 80.21) |
| Short circuit calculations for circuit breaker installation |
| Service Location and Riser Diagram (Michigan Part 8-80.21) |
| Show lighting system design, circuits, switches, materials, equipment listing, light fixtures and |
| installation instructions (2701.1 NEC110.2, 110.3) Show power system design, circuits, switches, materials, equipment listing, light fixtures and |
| installation instructions (2701; NEC110.2, 110.3) |
| Single line diagram including available fault current and bus bracing |
| Light fixture schedule |
| Show exit signs and lighting and power supply (1001.1, 1011.1) |
| Show egress emergency lighting (1001.1, 1006.1, 1011.1) |
| Indicate ratings of materials installed in wet locations (NEC 358) |
| Indicate wiring and materials in ducts, plenums and equipment |
| Indicate wiring methods, conduits and materials (NEC 300) |
| Show service conductors, conductor sizes, ratings and insulation (NEC230) |
| Indicate interrupting rating (NEC 110.9, 110.10, 230, 240.2) |
| Verify working space in front of equipment (NEC 110.26, 110.32, 110.34) |
| Indicate means of disconnect and number and location (NEC 230.70, 240.13) |
| Show ground fault protection (NEC 230.95) |
| Show hazardous locations and materials used |
| Indicate protection of conductors (NEC 240.3) |
| Indicate grounding of electrical system (NEC 250) |
| Show design of emergency electrical system (NEC 700) |
| PLUMBING PLANS (P106 3 1) |
| Show all underground plumbing and building riser diagram (P106 3.1) |
| Show design of water supply and distribution including sizes, depths and materials (P601.1) |
| Show plumbing fixture layout (P401.1, P106.3.1) |
| Provide water use calculations (P106.3.1) |
| Show all backflow prevention devices and type of device (P106.3.1, 601.1, 608) |
| Provide occupancy calculations for plumbing fixtures provided (Table P403.1) Show locations, equipment sizes and hookups for all boilers and water heaters (M101.2) |
| Provide details of water system design (P601.1) |
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| PLUMR | ING PLANS, CONT - |
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| T ECHIE | Indicates water temperature control devices (P607.1) |
| | Show hot water return circulation (if required) (P607.1) |
| | Indicate control of thermal expansion (P607.3) |
| | Indicate hot water heater relief valve discharge (P504) |
| | Show design and location of sanitary drains and vent systems including sizes, depths, slopes, |
| | materials and cleanouts (P701.1) |
| | Show details for any hazardous waste system (P702.5) |
| | Show design of storm water management system including sizes, depths, slopes, materials and |
| | cleanouts (P1101.2) |
| | Provide calculations for rainfall rates and water retention amounts(P1101.7, 1105, |
| | 1106, 1107) |
| MECHA | ANICAL PLANS (M106.3.1) |
| | Show compliance with International Energy Conservation Code (M301.2) |
| | Show protection of penetrations through all rated assemblies (302.2) |
| | Show equipment locations, service clearances and service access (M306.1) |
| | Show heating and cooling load calculations (M106 3.1; 312.1) |
| | Provide calculations for combustion air and exhaust air (M701.1) |
| | Hydronic Systems |
| | Show complete process piping diagram (M1201.1, 1201.2) |
| | Show provisions for combustion air supply and venting (M701.1) |
| | HVAC systems |
| | Show provisions for ventilation air, natural or mechanical (M401.2; 401.4) |
| | Show energy loads, equipment locations and equipment specifications including cfm |
| | and system static (M301.2, 303.1, 304.1) |
| | Show fire / smoke damper locations and details including rating (607.1) |
| | Show locations of smoke duct detectors in both return and supply ducts (M606.1) |
| | Show ductwork layout including gauges, hangers and sizing (M603.1) |
| | Show duct insulation details including R-factor and Perm. Rating (M604.1) |
| | Show location of vents for all fuel fired appliances (M804) |
| | Fuel piping systems |
| | Provide piping layout, load calculations and meter location (IFGC 402) |
| | Provide system operating pressure and pressure regulator detail (IFGC 402 416) |
| | Exhaust and ventilation systems (M501.1, M401.1) |
| | Show method of smoke control (M513) |
| | Provide documentation for Special Inspector (M513.3) |
| | Show hazardous exhaust systems (M510.1) |
| | Determine design class as hazardous or non-hazardous Provide MCDS data sheets to |
| | support hazardous level indicated (M510.1) |
| | Show locations for inlets, outlets and heights for exhaust equipment and hoods 502 |
| | Provide exhaust equipment specifications, cfm and static pressure (M106.3.1) |
| | Commercial kitchen hoods Type 1 and Type 2 (M507.1) |
| | Provide duct layout, grease door location and method of attachment (M506.3) |
| | Provide velocity cfm and location of ventilation equipment (507.1(3) |
| | Provide fire protection for Type 1 hoods (M509) |
| | Provide make-up air and equipment control diagram (M508.1) |
| | Provide hood sizing show top, side and front views (M507.4, 507.5, 507.11, 507.12) |
| | Provide complete appliance lineup under Type 1 hoods (M507.13) |
| | Provide Type 2 hoods for dishwashers (M507.2.2) |
| | Provide ratings for all hoods (M507.1) |
| | Refrigeration (1101.1) |
| | Provide classification for refrigeration system (M1103.3) |
| | Provide refrigerant classification (M1103.1) |
| | Provide occupancy classification (M1103.2) |
| | Provide quantity of maximum allowable refrigerant (M1103.1) |
| | Provide details for refrigeration system enclosure requirements (M1105) |
| | Provide pressure tests for all non-factory or field erected equipment & appliances |
| | Provide refrigerant piping diagram (1107.1) |

| BUILDING PERMIT APPLICATION CHECKLIST |
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| Please contact the local jurisdiction to determine what additional information may be required, the number of |
| sets of documents to be submitted and/or the requirements for phased construction or tenant finish permits |
| Contact information provided: Name, Address, Business phone, Cell phone Fax number and Email address |
| Building Permit Application filled out completely and signed by the Applicant (105.1, 105.3) |
| Construction Documents and Specification Manual, if used – Signed, sealed and dated by a State Licensed |
| Registered Design Professional (107.1) |
| Describe the business use and its intended operation (105.3) |
| Statement of Special Inspections – Include a complete list of materials and work requiring special |
| inspections, the inspections to be performed and their frequencies. Provide a list of agencies and firms you |
| propose to conduct each of the inspections and the qualifications, credentials and experience for each of the |
| individuals (1704.1) |
| Soils Report - Prepared by a State Licensed Registered Design Professional. The reports must have the State |
| Licensed Registered Design Professional's original signature, seal and date. (1803.6) |
| Energy Calculations and details to show compliance to the Michigan Uniform Energy Code Part 10a rules R408.31087a to R408.31099. ASHRAE/IESNA Standard 90.1 |
| <u>Structural Calculations</u> – For all structural members and foundations. Include the deflection limits and all |
| load calculations. All calculations must have the State Licensed Registered Design Professional's original signature, seal and date. (107.1) |
| <u>Hazardous Materials</u> – If hazardous materials are to be stored, dispensed, or used for manufacturing or |
| processing, describe the type, use, quantity, location and method of storage of all materials. Material Safety |
| Data Sheets (MSDS) must be submitted. The construction drawings shall address the requirements of the |
| MBC for high hazard use if quantities above the exempt amounts are proposed. Hazardous materials will |
| also be reviewed by the Fire Department (107.2.1; 307.1) |
| <u>Valuation</u> . State the valuation of the proposed work. (105.3 #5) |
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