PARISHISHT-2(B)

MAHDYA PRADESH ENERGY CONSERVATION BUILDING CODE

RULES

(MP-ECBC RULES)

Madhya Pradesh Urja Vikas Nigam Limited
(M.P. Govt. undertaking)

CONTENTS

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Address of the department where this document is being

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NOTIFICATION

<Letter Number> In exercise of the powers conferred by section 15 of the Energy Conservation Act, 2001 (52 of 2001), the Government of Madhya Pradesh hereby makes the following rules for implementation of MP-ECBC:

1 SHORT TITLE AND COMMENCEMENT

(1) These rules may be called Madhya Pradesh – Energy Conservation Building Code Rules (MP-ECBC RULES);

(2) They shall come into force on the date of their publication in the official gazette

2 DEFINITIONS

(1) In these rules, unless the context otherwise requires,-

1) "Act" means the Energy Conservation Act, 2001 (52 of 2001) and amendments thereof;

2) "Authority Having Jurisdiction" is Municipal Authority or Committee or Council or Nagar/Gram-Panchayat or Development and Planning Authority, which is entrusted with the responsibility of regulating the building approval/erection/re-erection in the areas falling in its jurisdiction;

3) "Best Practices" means those measures that- allow for optimization of efficiencies in the identified components and systems to enhance the energy efficiency of the building; or

(a) reduce the cost of construction having regard to the safety, stability of the building structure, health and environmental provisions of Central laws or State laws; and

(b) includes energy conservation measures approved by the MP-ECBC Implementation Committee;

4) "Building or Building Complex" means a structure wholly or partially enclosed within exterior walls, or within exterior and party walls, and a roof, affording shelter to persons, animals, or property. Building complex means a building or group of buildings constructed in a contiguous area for business, commercial, institutional, healthcare, hospitality purposes or assembly buildings under the single ownership of individuals or group of individuals or under the name of a co-operative group society or on lease and sold as shops or office space or space for other commercial purposes, having a connected load or contract demand as defined in Chapter-2 (Scope) of MP-ECBC;

5) "Built-up area" shall means the total built-up area of all floors excluding the area under lift wells, service ducts, machine rooms for lift, water tanks, escalators, lift lobby, fire escape, ramps, refuse shuts, service ducts, mezzanine floor, balcony up-to a width of 1.2 meter, parking areas, parking floors, mechanized parking areas, porch service floors, podium, private garage (not exceeding $25m^2$), servant quarter (not exceeding $25m^2$), basement (subject to provision of section-76 of Madhya Pradesh Bhoomi Vikas Niyam 2012 or its subsequent version(s)), corridors, arcades, lobbies, mumptee, staircases, entrance lobbies or foyer, atrium which is not for commercial activity, pump room, and two watch men hut (each not exceeding $6m^2$); but shall include covered projection exceeding the limit as described under section-58 of Madhya Pradesh Bhoomi Vikas Niyam 2012 or its subsequent version(s); Provided that in commercial use premises the area of foyer or entrance lobby located on the ground floor which exceeds the permissible ground coverage as per Bhoomi Vikas Niyam 2012 or its subsequent version(s) shall be counted in Built-up Area; If built from below the ground or reference level is used as habitat accommodation because of the existing topography such area may be permitted as habitable area and shall be counted in Built-up Area

6) "BEE/Bureau" means Bureau of Energy Efficiency, India;

7) "Building Bye-laws" means the Laws framed by a State Government or any authority under its control to regulate the building activities in its areas falling in the jurisdiction of all Municipal authorities or Committees or Councils or Nagar Panchayats or all areas covered under the Development or Planning authorities, under various development plans notified by a State Government or enforced by such authority in its jurisdiction in which MP-ECBC compliant building shall be located, and includes any regulation or rule framed by the State Government or any other authority having jurisdiction established by the State Government;

8) "Certified Energy Auditor (Building)" means a person who fulfils the eligibility criteria specified in the Energy Conservation (Minimum qualification for Energy Auditors and Energy Managers) Rules, 2006 issued under Energy Conservation Act, 2001 and has qualified National Examination for Energy Conservation Building Code Compliance;

9) "Commercial Building" is a building or building complex or a part of building which are used or intended to be used for commercial purposes and classified as per the time of the day the building is operational and sub classified, as per the functional requirements of its design, construction, and use as per following details:

   (a) Group I – 24 hours building covering Type A Hospitality, Type B Health Care and Type C Assembly, etc.,

   (b) Group II – Regular building covering Type D Business, Type E Educational and Type F Shopping Complexes;

10) "Compliance Document" are the forms specified in ECBC Rules and Regulations to record and check compliance with these rules. These include but are not limited to EPI Ratio Compliance Report, Building Envelope Compliance Form, Mechanical Systems Compliance Form and Permit Checklist, Lighting System Compliance Form and Permit Checklist and certificates from Certified Energy Auditor for existing or proposed buildings;

11) "Connected Load" is an the sum of the rated wattage of all equipment, appliances and devices to be installed in the building or part of building or building complexes, in terms of kiloWatt (kW) that will

be allocated to all applicants for electric power consumption in respect of the proposed building or building complexes on their completion; In these rules the values of connected load shall be referred as per Chapter-2 (Scope) of MP-ECBC;

12) "Construction Documents" drawings or documents, containing information pertaining to building construction processes and approvals, building materials and equipment specification, architectural details etc. required by the authority having jurisdiction;

13) "Contract Demand" is the maximum demand in kiloWatt (kW) or kilo Volt Ampere (kVA) (within a consumer's sanctioned load) agreed to be supplied by the electricity provider or utility in the agreement executed between the users and the utility or electricity provider; In these rules the values of contract demand shall be referred as per Chapter-2 (Scope) of MP-ECBC;

14) "Department" means New & Renewable Energy Department, Government of Madhya Pradesh

15) "Distribution Licensee" means an authorized licensee to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply;

16) "Empanelled Energy Auditors (Building)" means a firm consisting of the certified Energy Auditor certified under Bureau of Energy Efficiency (certification Procedure for Energy Auditor and Energy Managers) Regulations, 2010 and Certified Energy Auditor (Buildings) and empanelled with the Bureau or State Designated Agency;

17) "Energy Performance Index" or "EPI" of a building means its annual energy consumption in kiloWatt-hours per square meter of the area of the building which shall be calculated in the standard or proposed building as per the formula below,

EPI =annual energy consumption in kWh (including that procured through open access or produced on-site, but excluding on-site renewable energy produced on-site) / built–up area (excluding storage area and the parking in the basement)in m^2;

where, annual energy consumption is calculated for a period of full twelve-months, immediately after the date of occupancy, and every twelve-months thereafter;

18) "Energy Performance Index Ratio (EPI-Ratio)" of a building means the ratio of the EPI of the Proposed Building to the EPI of the Standard Building;

19) "Establishment" means a business or other organization, or the places where an organization operates and includes Government establishment and private establishment;

20) "Form" means the forms appended to these rules;

21) "Madhya Pradesh - Energy Conservation Building Codes (MP-ECBC)" means the Energy Conservation Building Codes amended as Madhya Pradesh-Energy Conservation Building Code (MP-ECBC) or its subsequent updated version notified by the department;

22) "Madhya Pradesh Urja Vikas Nigam Ltd. (MPUVNL)", designated as 'State Designated Agency' as per clause (d) of section-15 of EC-Act 2001 that has the responsibility to coordinate, regulate and enforce provisions of this Act within the state;

23) "Owner" is a person, group of persons, company, trust, institute, Registered Body, state or central Government and its attached or sub-ordinate departments, undertakings and like agencies or organization in whose name the property stands registered in the revenue records for the construction of a building or building complex;

24) "Proposed Building" is consistent with the actual design of the building and complies with all the mandatory requirements of MP-ECBC;

25) "Proposed Design" is a computer model of the proposed building, consistent with its actual design, which complies with all the mandatory requirements of MP-ECBC;

26) “Representative” means a nominee of a department having an authorization on behalf of the organization who is eligible to take necessary decisions;

27) "Standard Building" is a building that minimally complies with all the mandatory and prescriptive requirements of Madhya Pradesh Energy Conservation Building Code and has same floor area, gross wall area, and gross roof area of the Proposed Building;

28) “Standard Design” is a computer model of a hypothetical building, based on actual building design that fulfils all the mandatory requirements and minimally complies with the prescriptive requirements of MP-ECBC, as described in the Whole Building Performance method;

(2) Words and expressions used herein and not defined, but defined in the Act, or in the MP-ECBC or National Building Code or its subsequent amendment(s) or its subsequent updated version(s) shall have the meanings respectively assigned to them in the Act or the said MP-ECBC or National Building Code.

3 APPLICATION

These rules will be applicable to every New-building or -building complex or thereof, which falls under the section-2 (scope) of Madhya Pradesh Energy Conservation building Code (MP-ECBC)

While, it will also be applicable on existing-buildings or building complexes:

(a) If there is addition or alteration in the building, after which the revision in their connected load or contract demand (remains same, decreases or increases then existing load or demand), if falls under limits as prescribed in section-2 of MP-ECBC; than Owner will be liable to fulfill compliance as mentioned under clause (3) of section-3 of MP-ECBC;

Or

(b) If there is no addition or alteration in the building, but still there is revision in their connected load or contract demand, if falls under limits as prescribed in section-2 of MP-ECBC; than Owner will be liable to receive an approval through declaration from State Designated Agency under surveillance of

Madhya Pradesh Energy Conservation Building Code Implementation Committee

4 COMPLIANCE AND APPROACH

The compliance and approach needs to be adopted as briefed in MP-ECBC, or its subsequent amendment(s) or its subsequently updated version(s).

5 INSTITUTIONAL SETUP

For smooth functioning, implementation and enforcement of MP-ECBC, the following committees shall be constituted:

(1) **MP-ECBC IMPLEMENTATION COMMITTEE:** The State shall constitute 'MP- ECBC Implementation Committee', headed by Chief Secretary of Madhya Pradesh or his nominee, and comprise of the following:-

- Chief Secretary, GoMP or his nominee – Chairman
- Principal Secretary/ Secretary, New and Renewable Energy Department - Member;
- Principal Secretary, Urban Development and Housing Department – Member;
- Principal Secretary, Public Works Department – Member;
- Principal Secretary, Panchayat and Rural Development Department – Member;
- Principal Secretary, Housing and Environment Department – Member;
- Director, Town and Country Planning Planner - Member;
- Project Director, Project Implementation Unit / Engineer in Chief Public Works Department - Member;
- Chief Architect, Public Works Department - Member;
- One representative from each DISCOM - Members;
- Representative of BEE, MoP – Member;
- Three technical experts to be nominated by the Department – Member;
- Managing Director, MPUVN – Member Secretary;

The MP-ECBC Implementation Committee would have the following responsibilities:

a) promote energy efficiency standards through optimization of parameters in the various components and systems of the building in line with the provisions of these rules to enhance building performance and provide

every support to it to make it an effective instrument of promoting energy conservation and energy efficiency in the commercial buildings or establishment;

b) forward its recommendations to the Bureau to assist the National Energy Conservation Building Code Implementation Committee to develop and revise energy consumption standards for buildings, in terms of energy performance index, zone-wise – hot and dry and composite zone, classification-wise;

c) create awareness about MP-ECBC and procedure for erection of MP-ECBC compliant building;

d) promote construction of energy efficient buildings ensuring quality and consistency in their construction having regard to the climatic conditions and needs of the building projects;

e) promote capacity building of building professionals, developers and contractors to promote energy efficient designs of buildings in close co-ordination with authority having jurisdiction;

f) to develop and regulate fee-structure/financial-arrangements for department/organization/developers/others having their role and responsibilities for implementation of MP-ECBC and its Rules, whenever required.

g) undertake performance review of annual work of all Empanelled Energy Auditors (Building), executing projects in the States to check their credentials;

h) undertake necessary revisions on role and responsibilities of the MP-ECBC Technical Grievances Redressal Committee as per requirement, or on the basis of suggestions from authority having jurisdiction, DISCOM, SDA;

i) Once in a five year, ECBC for Madhya Pradesh should be reviewed,

or

as and when necessary to revise ECBC specified in these rules in consultation with the Bureau.

j) review summary of violations of building compliance and list of responsible EEA-(Building), which shall be provided by Authority Having Jurisdiction/State Designated Agency, review yearly reports and furnish the same to the Bureau indicating inter alia the progress made in compliance of these rules in the State and the steps taken by the Authority having Jurisdiction/State Designated Agency to improve the compliance of MP-ECBC in the State;

(2) MP-ECBC TECHNICAL GRIEVANCES REDRESSAL COMMITTEE:

The MP-ECBC Implementation Committee shall establish MP-ECBC Technical Grievances Redressal Committee, headed by an officer of Urban Development Department of the State, with the following members:-

- a representative from Urban Development & Housing Department (Chairman)
- a representative of the State Designated Agency (member)
- a representative of the concerned Authority Having Jurisdiction (member)
- a technical expert (member)

The role of the MP- ECBC Technical Grievances Redressal Committee is to:

a) hear all grievances filed in this respect

b) hear grievances filed by the owner of MP-ECBC compliant building within the specified time period given by the authority having jurisdiction relating to the building permit, completion certificate, occupancy certificate of building, including determination of the EPI-Ratio at the completion stage and interpretation of these rules or any other grievance arising out of the implementation of MP-ECBC and these rules;

c) make recommendations to the authority having jurisdiction to reconsider such issue, or for implementation by the authority having jurisdiction, as the case may be.

6 PROCEDURE FOR ERECTION/RE-ERECTION OF MP-ECBC COMPLIANT BUILDING

Erection/re-erection of applicable building/ building-complex as per compliance procedure of MP-ECBC comprises of three phases- design, construction, and post-construction, Owner needs to capture the following major milestones during execution of these phases-

- to hire/appoint EEA-(Building)
- to achieve Unique Building Identification Code (UBID) from authority having jurisdiction,
- to achieve EPI-ratio on completion of building erection/ re-erection

Additionally, owner needs to understand that the compliance with MP-ECBC requires an integrated design process. The owner shall appoint EEA-(Building) along with the design team with experts in various disciplines which are appointed/ hired, and shall be equipped with thorough knowledge on MP-ECBC or on energy efficient building designing. Further details on process to be followed during erection/ re-erection for compliance with MP-ECBC for building/building complex as per three phases have been briefed below:

DESIGN PHASE

(1) Every owner who intends to erect/ re-erect a building or building-complex or make alterations or additions in any building or building-complex covered under these rules shall submit to concerned authority having jurisdiction, an application FORM-I annexed with these rules accompanied by:

a) construction documents duly signed by the owner together with an undertaking in FORM-I;

b) construction documents shall ensure-

(i) compliance with the applicable building bye-laws in force;

(ii) building design incorporates energy conservation measures and best national and international practices having regard to the climatic conditions of the site and specific needs of the building so as to optimize the energy performance index ratio of the building;

(iii) that all the data, building features, identified energy conservation measures under various building components and systems are shown in details and in the manner specified in the applicable bye-laws;

(iv) the drawing of plan, colour of plan, dimension of plan, scale of plan as per requirements of the applicable bye-laws in force;

c) compliance documents covering the construction of components and systems as per MP-ECBC, duly certified by EEA-(Building) , which includes the following:

(i) energy performance index ratio report in respect of the proposed building at the design stage;

(ii) certificate in FORM-II by EEA-(Building) certifying the compliance documents as annexed with these rules;

(iii) energy conservation measure identified through scrutiny and verification; and

(iv) an application with heading super-scribed "Application for permission to erect/re-erect an MP-ECBC Compliant Building", duly signed by the owner seeking building permission from the concerned authority having jurisdiction before starting construction work in respect of the proposed building.

Note: Submission of relevant documents as mentioned under 'design stage' of this rules, to authority having jurisdiction may be required in electronic form or hard copy of the documents

(2) EEA-(Building), at the design stage, shall follow the following procedure of inspection, namely:-

a) scrutinize the construction documents with respect to area of floor, window, wall, roof and project's built-up area;

b) scrutinize the MP-ECBC compliant documents and the checklist as specified in the Appendix-D of the MP-ECBC and identify, verify and certify:

(i) the energy conservation measures that are applicable to the proposed design of buildings;

(ii) insulation quantities in walls and roof, and the construction assemblies, solar heat gain coefficient, visible light transmittance and thermal transmittance (U-factor) for window assemblies;

(iii) heating, ventilation and air-conditioning component tables for air-handling equipment, refrigeration equipment, condensing equipment and air-flow summaries; along with their equipment efficiencies and controllers;

(iv) tables showing lighting equipment schedules, and lighting power density calculation in design documents, along with lighting controls;

(v) motor efficiencies and controls;

(vi) findings of the document review to match with the energy model inputs for the proposed building by using the simulation tool approved by the Bureau;

(vii) scrutinize projection on energy performance index ratio at design stage;

c) fill the checklist as specified in the Appendix-D of MP-ECBC and issue correction list in case the design documents of the proposed design of building provide inadequate information or do not meet the requirements of these rules and shall-

(i) communicate findings in FORM-II to the owner of the building under intimation to concerned authority having jurisdiction;

(ii) give specified time to the owner to implement findings as mentioned in FORM-II;

(iii) satisfy that the communication received from the owner within the specified time, meet the findings and rectify FORM-II as per the shortcomings;

d) record his approval and complete the checklist conforming compliance with the MP-ECBC and these rules, and issue the certificate of approval in FORM-II to the owner, accompanied by construction documents duly signed by the owner, under intimation to the concerned authority having jurisdiction and state designated agency.

(3) The authority having jurisdiction on receiving the application from owner as per Rule-6(1) for issue of permit for construction of proposed building shall-

a) approve the design and sanction building plan only after receiving approved certificates in the form of FORM-I and FORM-II from the EEA-(Building);

b) grant permit to erect or re-erect the building or add to or make alterations in the building to carry out the construction works subject to the following conditions in its sanction letter-

(i) construction work shall be in accordance with the sanctioned plan and requirement under the MP-ECBC and these rules;

(ii) compliance with these rules shall be achieved during construction-in-progress;

(iii) building shall not be occupied before issuance of occupancy certificate to the owner;

(iv) the authority having jurisdiction may, at any stage, revoke the permit on receipt of non-compliance report from the EEA-(Building) or on the notice of any misrepresentation of material facts in the application in respect of the provision of these rules or the MP-ECBC after giving a reasonable opportunity of being heard to the owner;

c) Before sanctioning of building plans (issue of approval), all the submitted FORMS (duly signed by EEA-(Building)) as per these rules by Owner need to be shared with SDA; sharing of relevant documents to

SDA may be processed via electronic medium or hard copy of documents;

d) Before granting approval on design documents, authority having jurisdiction needs to generate Unique Building Identification Code (UBID), and provide a copy of UBID to Owner along with approved documents, and also circulate copy of UBID to SDA and relevant DISCOM, as per Annexure-D of MP-ECBC;

e) In case of erection/re-erection/renovation of building leading to building falling in applicability criteria as per MP-ECBC, the same process is to be followed as defined in these Rules.

CONSTRUCTION PHASE

(4) On receiving the permission for construction from authority having jurisdiction, the owner shall-

a) give notice of his intention to start the construction work of the building in FORM-III;

b) undertake construction of energy conservation measures incorporated in the construction documents as per Rule-6(1)(b);

c) have flexibility in constructing the building components and systems covered in the construction as per these Rules, to most effective use of energy by deploying best practices in such components and systems to optimize the energy performance index ratio;

d) take the approval of EEA-(Building) before undertaking such construction as per Rule-6(1)(b), if the components and systems proposed to be constructed are other than those incorporated in the construction and compliance document;

e) if required, apply for permanent electrical connection (new/renew) to Distribution Licensee along with submitting a attested copy of UBID FORM; if Owner wants to have temporary connection, then Owner shall not need to submit UBID FORM to Distribution Licensee;

(5) The authority having jurisdiction on receiving of notice as per Rule-6(1) for construction of proposed building from Owner shall-

a) ensure that they have received a certificate in FORM-III and FORM-IV

from the owner which are duly signed by EEA-(Building);

b) If submitted FORM-IV states non-compliance with MP-ECBC, then shall share status immediately with MP-ECBC Technical Grievances Redressal Committee and SDA so as to understand/take necessary action during the construction stage

c) ensure that all submitted FORMS of MP-ECBC during construction stage are shared with MP-ECBC Technical Grievances Redressal Committee and SDA within five working days; would be processed via electronic medium or hard copy of documents

d) in case of non-compliance from EEA-(Building) via FORM-IV as mentioned in these Rules, AHJ needs to ensure that construction is stayed until necessary correction has been effectuated and a certificate of compliance (FORM-IV) has been issued by EEA-(Building)

(6) Distribution Licensee, on receiving application form for permanent electrical connection (new/renew) from owner, shall review, verify parameters as discussed below:

a) need to gather a attested copy of UBID FORM from owner, and verify it with the UBID FORM received from authority having jurisdiction as per Rule-6(3)(d)

b) for providing temporary connection for any MP-ECBC compliant building application need not require any sort of document, particularly as per these Rules; though if there is request from owner on conversion of temporary connection to permanent connection, then need to proceed as per Rule-6(3)(d).

(7) The EEA-(Building), at construction stage, shall review and verify the parameters specified in Rule-6(2) and,-

a) fill out the checklist specified in the Appendix-D of the MP-ECBC, provide comments if the proposed design of building does not meet the construction requirements and specify the shortcomings in compliance to the MP-ECBC, these rules and sanctioned plan, and shall-

(i) communicate its shortcomings and findings to the owner;

(ii) give specified time to the owner to implement its findings;

(iii) satisfy that the communication received thereafter from the

owner meets the specified findings and fulfil shortcomings;

b) record his approval and complete the checklist as per compliance with the MP-ECBC and these rules, and issue a certificate of compliance as per FORM-IV to the owner under intimation to the authority having jurisdiction;

c) where it is determined at any phase that, construction is not proceeding in accordance with the sanctioned plan, or is in violation of the provision of the MP-ECBC and these rules, EEA-(Building) shall notify the owner, and request for additional information with respect to his findings or on the shortcomings identified by him as per FORM-IV;

d) in case the EEA-(Building) is satisfied with the additional information provided by the owner, he shall report the same in the certificate of compliance in FORM-IV and communicate the same to the owner under intimation to the authority having jurisdiction;

e) in case the EEA-(Building) is not satisfied with the additional information submitted by the owner, he shall report the same to the authority having jurisdiction to ensure that all further construction is stayed until correction is effectuated and a certificate of compliance has been issued by EEA-(Building)

POST-CONSTRUCTION PHASE

(8) Every owner shall submit a notice of completion of the building to the authority having jurisdiction on the completion of work including the works related to energy conservation measures as specified in the sanctioned permit along with the certificate in FORM-V issued by the EEA-(Building) certifying the completion of the building accompanied by-

a) the duly completed compliance FORM-IV together with checklist of various components covered under Rule-6(2) at the completion stage which shall include the following:

(i) review of heating, ventilation and air-conditioning component tables for air-handling equipment, refrigeration equipment, condensing equipment, air-flow summaries, tables showing lighting equipment specification, and tables showing motor specification;

(ii) inspection of lighting equipment like lamps, ballasts, to confirm fixture wattage and inspection shall include at least random check across, according to the type of usage in the building to determine lighting power density;

(iii) review the required lighting controls, such as manual switching off perimeter, day lighting circuits, automated occupancy based control, photo sensor controls, and automated timer based controls;

(iv) review of coefficient of performance values of installed heating, ventilation and air-conditioning equipments and control equipments;

(v) review of efficiencies of installed motors and controls;

(vi) review of power factor and power distribution losses;

(vii) review the required check metering and monitoring system

b) a list of energy related building features in the proposed design, if any, which are different from the sanctioned or standard design;

c) all documents and invoices in support of the construction undertaken with respect to all energy conservation measures, including insulation, fenestration, heating, ventilation and air-conditioning, lighting and electrical systems, water heating systems of the building

(9) If calculated EPI ratio at the completion stage is less than or equal to one as compared to the sanctioned plan of the building, it shall be deemed to have complied with the MP-ECBC and these rules

(10) If there is deviation in the EPI-ratio, then, if it is more than one as compared to the standard building as of sanctioned plan of the building, EEA-(Building) shall record its findings in FORM-IV and communicate the same to owner and seek compliance of the same through incorporation of additional energy conservation measure. The EEA-(Building) shall render technical assistance to the owner to ensure that the proposed design of the building becomes compliant with these rules.

(11) The owner shall neither occupy nor allow any other person to occupy the building or building complex or part of the building covered under these rules

for any purpose until such part thereof has been granted occupancy certificated under the bye-laws of the authority having jurisdiction

(12) The owner shall give notice of completion of the building and seek permission for occupancy

(13) The authority having jurisdiction on receiving notice from the owner accompanied by approved certificate by EEA-(Building) as FORM-V, can issue the occupancy certificate incorporating inter alia the following conditions, namely-

(i) that the energy performance of the building shall be monitored and verified by the State Energy Conservation Building Code Implementation Committee

(ii) that the owner through the EEA-(Building) shall submit to the State Designated Agency, an energy performance index report under intimation to Bureau for two consecutive years after the building has been fully operational as per Annexure-III of these rules, or whenever asked by State Designated Agency;

(14) Till the building will be in operation, its energy performance index will be monitored by SDA, with the help of energy consumption details received from distribution licensee for the relevant UBID's provided by the authority having jurisdiction during the end of design stage; while in case of Multiple-Owners or of Multiple-Tenants, energy consumption monitoring will be tracked as per Rule-8(10), or as per Rule-11(4) and record it as per Annexure–III.

(15) In case the energy performance index ratio of the building is more than one, the authority having jurisdiction may issue a provisional occupancy certificate, subject to the condition that the owner shall under take energy audit of the building to identify additional energy conservation measures to achieve the EPI-ratio of the building approved in the sanctioned plan or permit within a period of three years

(16) If owner fails to achieve the EPI-ratio as per procedure specified in Chapter-3 (Compliance and Approach) as defined in MP-ECBC, from the date of occupancy of the building, the State Designated Agency shall place the matter before the MP-ECBC Implementation Committee which shall hear the owner

and the EEA-(Building) and make recommendations in the matter accordingly, thus Owner will be liable to comply with such recommendations

(17) SDA along with MP-ECBC Technical Grievance Redressal Committee, or individually shall conduct random energy audits of buildings with the help of EEA-(Building). Method for random check will be devised and shared publicly

(18) If any mis-information, or malpractice is found by MP-ECBC Technical Grievances Redressal Committee, it shall report to MP-ECBC Implementation Committee.

(19) The process shall be continued repeatedly till the EPI-ratio of the building comes to less than one or equal to one, and EEA-(building) shall fill and submit the compliance checklist documents, as specified in Appendix-D of the MP-ECBC, of various energy conservation measures at each stage, namely, design, construction and completion, to achieve conformity with the MP-ECBC and these rules

7 RIGHT OF APPEAL

(1) The Owner/EEA-(Building) may approach the MP-ECBC Technical Grievances Redressal Committee for redressal of any grievances under the provision of these rules:

(a) MP-ECBC Technical Grievances Redressal Committee shall hear grievances raised by owner/ EEA-(Building), in consultation with SDA and authority having jurisdiction and shall liable to take necessary action for rectification of grievances raised; a copy of the same shall be conveyed to MP-ECBC Implementation Committee

(b) The MP-ECBC Technical Grievances Redressal Committee in consultation with SDA shall hear appeal filed by the owner of a building, within 45 days against the cancellation of building permit or non-issue of completion or occupancy certificate of building for the following cases, namely,-

(i) interpretation of the provisions of these rules in relation to any dispute;

(ii) non-issue of completion or occupancy certificate due to non-compliance with the EPI-Ratio approved in the sanctioned plan;

(iii) any other matter covered under these rules for not achieving the EPI-Ratio at the completion stage;

(iv) issue(s) related to professional misconduct of the EEA-(Building);

(2) Any person aggrieved by an order passed by the MP-ECBC Technical Grievances Redressal Committee or any other authority under the State Government, may prefer an appeal before MP-ECBC Implementation Committee within a period of forty-five days from the date on which a copy of the order made by the MP-ECBC Technical Grievances Redressal Committee is received by the person;

(3) Order passed by the MP-ECBC Implementation Committee, will be considered as final.

8 ROLES AND RESPONSIBILITIES OF OWNER:

(1) The owner of MP-ECBC compliant building shall carry out the work of the said building in accordance with the requirements of the MP-ECBC and these rules.

(2) Every owner shall-

1) Engage EEA-(Building) in development of building design, installation of energy conservation measures and equipment to meet with the requirements of these rules and ensure the following:-

(a) finalize the compliance approach relevant for his building project based on the complexity of the building, budget and time constraints;

(b) finalize the energy conservation measures as per the MP-ECBC as amended from time to time, having regard to the location of the proposed building;

(c) to integrate the energy conservation measures in the building design in accordance with the provisions of these rules;

(d) that drawings, specifications and compliance forms are prepared and energy conservation measures are reflected in the building design documents and submitted to the authority having jurisdiction in compliance with the requirements of the rules

accompanied by a certificate specifying the energy performance index ratio of the building by the Empanelled Energy Auditors (Building) that the documents are as per the requirement of these rules;

(e) notice is given within the validity of sanction to the authority having jurisdiction of his intention to start the construction work at the building site;

(f) commence the work within the period specified by the authority having jurisdiction from the date of such notice or seek extension of time for starting the construction work, wherever necessary;

(g) ensure that the designed energy conservation measures are deployed in the construction of the building and installation of its components and systems.

2) permit EEA-(Building) to enter the building or premises at any reasonable time for the purpose of inspection to ensure compliance of building works with rules and regulations under the Act;

3) give written notice to the authority having jurisdiction intimating the completion of the construction work along with a certificate from the Empanelled Energy Auditors (Building) to the effect that-

(a) the construction of the building has been done in accordance with the sanction of the building permit;

(b) all the energy conservation measures have been installed and inspected, and they meet the requirements of the MP-ECBC and these rules;

(c) the building design meet with the provisions of the MP-ECBC and these rules;

4) give written notice to the authority having jurisdiction as well as to the State Designated Agency in case of termination of the services of EEA-(Building) and appointment of other EEA-(Building) in its place;

5) obtain an occupancy permit from the authority having jurisdiction prior to any occupancy of the building or part thereof after completion of the building;

6) report the practical difficulties to the EEA-(Building), if any, in carrying

out the provisions of these rules, who shall take necessary action in consultation with State Designated Agency and MP-ECBC Implementation Committee;

7) on the receipt of the notice, if any, from the authority having jurisdiction or MP-ECBC Implementation Committee, he shall discontinue such usage within reasonable time as specified in such notice and in no case he shall disregard the provisions of these rules;

8) where he proposes to alter the installation of any system or material or equipment on account of improving the energy efficiency of the building contrary to the system, material or equipment as indicated in the sanction plan he shall use or install such system or material or equipment after obtaining the necessary approval of the EEA-(Building);

9) If a building/building complex falls under applicability as per Rule-3, and is mixed-used type as per Chapter-2.5(g) of MP-ECBC; then energy consumption monitoring for the building shall be done as per Rule-11(3); while monthly energy consumption has to be monitored separately for each multiple tenant(s), for which Owner shall:

(a) provide sub-meters for each tenant(s) for monitoring energy consumption;

(b) monitor and record monthly energy consumption details via sub-meters;

(c) track and record monthly energy consumption of single/multiple tenant(s) as mentioned below-

(i) 'Multiple-Tenant Suffix Code' after UBID has to be added as UBID-M_n/(k); where $M_n = M_1, M_2, M_3, M_4,\ldots$ are the no. of possible tenant in the building, and k = Meter no. which will be alloted to each tenant;

(d) address the policy's sub-metering and energy monitoring clause as per these rules in lease agreement with each tenant(s);

(e) record and track, energy consumption of each tenant, and share/submit energy consumption details to SDA or MP-ECBC Implementation Committee, whenever required as per format

prescribed in Annexure-III (under multiple-tenant(s) in building). For further understanding, please refer below procedure:

(i) a building going to have multiple tenant(s) will receive his UBID (XXXX/ECBC) by authority having jurisdiction along with approvals of building plans;

(ii) when, multiple tenant(s) will seek sub-metered electrical connection, then owner will add suffix M_n/(k) with UBID, which can be addressed as UBID-M_n/Meter no. for each tenant;

- energy consumption can be monitored via computer application or measuring instrument (for regular monitoring) from start to end of the each month; Or
- if done manually, then has to capture photograph of each sub-meters while gathering the energy consumption details along with tenant signature (also needs to ensure that noted energy consumption of each meter has to match with photograph);

Provided that it does not violate the spirit and intent of the provisions of these rules; Provided further that such change shall not compromise with the building requirements namely, structural stability, safety, health or environmental provisions of Central laws and State laws applicable to the buildings covered under these rules.

9 ROLES AND RESPONSIBILITIES OF EEA-(BUILDING)

The EEA-(Building), whose services are engaged by the owner, shall -

(1) verify and certify –

(a) the design of the building keeping in view the design criteria, energy goals of the project, energy systems performance verification plan, and the modelling approach;

(b) the energy conservation measures based on the design approach for the project under consideration;

(c) construction documents and compliance documents, compliance forms and checklists specified to ensure that the building complies with the MP-ECBC and these rules;

(d) energy performance index ratio of the proposed building;

(2) furnish a certificate under its seal and authorized signature to the effect that drawings, specifications, construction documents, compliance documents and forms prepared covering building envelope, comfort system and controls, lighting and electrical power systems, wherever applicable, and all other MP-ECBC related documentation prepared for submission to the authority having jurisdiction ensuring compliance with these rules;

(3) inspect the building works from the design stage to its commissioning stage of buildings, including their uses under these rules, and based on his certification, the authority having jurisdiction shall issue building permit, approve construction of building, issue completion and occupancy certificates;

(4) the EEA-(Building) shall ensure that none of the professionals or employees working under him/her is engaged in any work in connection with the construction or alteration of the concerned building covered under these rules to ensure that there is no conflict of interest with his/her official duties with the interests of the authority having jurisdiction;

(5) report to SDA/MP-ECBC Technical Grievances Redressal Committee on such unusual technical issues that may arise due to issue of building permit or construction of building or during occupancy stage;

(6) provide inputs to the National and State Energy Conservation Building Code Implementation Committees to facilitate for better implementation of the MP-ECBC and these rules;

(7) promote norms and standards specified in the MP-ECBC;

10 ROLES AND RESPONSIBILITIES OF STATE DESIGNATED AGENCY

The State Designated Agency established by the State Government under clause(d) of section-15 of the EC Act, in consultation with Bureau, shall–

(1) coordinate, regulate and enforce provisions of the MP-ECBC and these rules in the State for efficient use of energy and its conservation under the Act;

(2) ensure every commercial building or establishment having a connected load or contract demand as per the limits mentioned under Chapter-2 (Scope) of MP-ECBC, to be constructed in compliance with these rules;

(3) monitor the performance of the EEA-(Building) to improve the quality, consistency and rate of compliance of these rules with a view to make the cadre of EEA-(Building) as effective instruments for promotion of energy efficiency in the building sector in the State;

(4) create a data bank in the State to measure the compliance rates of the MP-ECBC compliant buildings and accurately account for the energy savings resulting from the compliance of these rules;

(5) create a data bank on energy use per square meter of area of the building under different climatic regions namely, hot-and-dry climate and composite climate, separately for the State;

(6) take necessary steps to make energy performance index as a measure to comply with these rules in the various categories of buildings and send its recommendations to the Bureau for the formulation of energy consumption norms and standards in respect of various categories of buildings constructed in different climatic zones in the State;

(7) conduct site visits, or 3rd party assessment, if necessary, to determine the accuracy of reporting by EEA-(Building);

(8) conduct site-visits for necessary checks if required as per Rules-3(b), and share necessary approval through MP-ECBC Implementation Committee on the declaration shared by owner

(9) prepare a report on performance of EEA-(Building), listing out the projects complying with these rules, projects in violation of compliance with these rules and the level of violation, and provide summary of such violations for each year to the Bureau of Energy Efficiency;

(10) coordinate with authority having jurisdiction to amend their building bye-laws, incorporating the provisions of these rules for the purpose of construction of buildings in compliance with MP-ECBC and these rules;

(11) support the authority having jurisdiction to conform to the provisions of these rules with regard to matters concerning design construction, including energy conservation measures and occupancy for improving the energy performance of MP-ECBC compliant buildings and effectiveness in compliance of these rules;

(12) provide technical support to DISCOM or Electric Regulatory Commission to conform to the provisions of these rules; especially for matters concerning monitoring and circulating energy consumption of the building for improving the energy performance of MP-ECBC compliant buildings and effectiveness in compliance;

(13) coordinate/facilitate the BEE to conduct state level examination certification of EEA-(Building) ; to conduct empanelment of 'EEA-(Building)' in the State;

(14) inter-act with State Government to ensure that-

1) These Rules are made part of buildings Bye-laws of the State Municipal Authorities or Development Agencies or other Urban/Rural local bodies concerned with building related activities the State;

2) Reasonable level of penalties is imposed in case of violations or non–compliance with the provisions of these rules for failure to meet the obligations imposed on the owner for enforcement of these rules;

11 ROLES AND RESPONSIBILITIES OF DISTRIBUTION LICENSEE

The distribution licensee responsible for granting permanent electrical connection (new/renew) to owner of MP-ECBC compliant building, shall ensure that:

(1) Unique Building Identification Code (UBID-Code) submitted by owner, is cross-verified with the UBID-Code shared by authority having jurisdiction; before acceptance of application for permanent electrical connection (new/re-new), from owner, which is eligible as per Rule-3;

Or

Before acceptance of application of renewal of existing permanent electrical connection for Owner which falls under the requirements of Rule-3 (application), shall ensure that application is attached with the approved letter of 'Declaration from Owner' by MP-ECBC Implementation Committee as per Rules-3(b)

(2) for building which are partly classified as residential plus commercial, residential plus hospital, industry commercial, and others; then building area/space which falls under classification as per Rule-3, energy consumption shall be monitored as per Rule-11(4);

(3) share the energy consumption details of consumers of the MP-ECBC Compliant building/building-complexes regularly with SDA as prescribed format annexed as Annexure-III of these rules;

(4) If a building/building complex falls under applicability as per Rule-3, and is mixed-used type as per Chapter-2.5(g) of MP-ECBC; then energy consumption monitoring for the building shall be done as per Rule-11(3); while monthly energy consumption has to be monitored separately for each multiple owner(s), for which distribution licensee shall:

1) be liable to monitor energy consumption of each owner(s);
2) track and keep records of monthly energy consumption data of all metered electrical connections of the building;
3) maintain the record of monthly energy consumption of multiple-owner(s) such that a 'Owner Suffix Code' after UBID has to be added as UBID-M_n/(k); where $M_n = M_1, M_2, M_3, M_{4,....}$ are the no. of possible owner(s) in the building, and k = Meter no. which will be alloted to each owner;
4) share energy consumption of multiple-owner(s) of a building with SDA or MP-ECBC Implementation Committee as per format mentioned in Annexure-III (under multiple-owner(s) in building). For further understanding, refer below procedure:
   (a) A building going to have multiple-owner(s) will receive his UBID (XXXX/ECBC) by authority having jurisdiction along with approvals of building plans;
   (b) When multiple-owner(s) will seek for permanent electrical connection then distribution licensee will add suffix M_n/(k) with UBID, which can be addressed as UBID-M_n/Meter no. for each owner;

(5) If a building/building-complexes need to comply with these rules, then for building with multiple tenant(s) having controlled by owner than distribution

licensee shall provide energy consumption details only for building as a whole, as per Rule-11(3)

12 ROLES AND RESPONSIBILITIES OF AUTHORITY HAVING JURISDICTION

(1) To ensure that existing process of 'building approval system', for erection/re-erection of building/building-complexes; will be in synch with the requirement of these rules after notification;

(2) To ensure that all UBID generated shall have a suffix 'ECBC', syntax as (XXXX/ECBC) for MP-ECBC compliant building, and ensure that UBID will be issued, once complete set of FORMS are received as mentioned in Rules-6

(3) To ensure that all MP-ECBC FORMS have been duly signed by EEA-(Building) and also uploaded/submitted before approval of building plans of MP-ECBC complaint buildings

(4) To ensure that compliance certificate have been submitted by EEA-(Building) at different construction stages for MP-ECBC complaint buildings

(5) In case of non-compliance certificate received by EEA-(Building) during the construction phase, authority having jurisdiction shall have the power to put a stay order on the construction till corrective measures are implemented

(6) To ensure that UBID generated and shared with SDA and relevant DISCOM within five working days via electronic medium and hard copy of the UBID FORM is duly sealed by Authorized Official

13 INCENTIVES

If any building complies with the MP-ECBC, then building owner shall be awarded with certificate based on Energy Performance Levels as mentioned under clause (1) of section-2 of MP-ECBC; while,

MP-ECBC compliant building, designed & constructed based on natural ventilation or mixed mode, will receive preference in demonstration or research work in relevant field(s) undertaken by State Government, and will also receive preference, if/when an incentive program is launched by MP-ECBC Implementation Committee.

14 MISCELLANEOUS

(1) The use of any energy conservation measures or method or design or construction, not specifically specified under these rules, shall not be prevented by the authority having jurisdiction, if such energy conservation measures or method or design or construction is found to be satisfactory by the MP-ECBC Technical Grievance Redressal Committee and such energy conservation measures or method or design or construction assist the owner in optimizing the energy performance index ratio in the use of energy on its occupancy

(2) The MP-ECBC shall be reviewed periodically, at least once in five years, to determine the need for revision or withdrawal of standards specified in MP-ECBC, and such standards which in the opinion of the Bureau need no revision or amendment shall be reaffirmed

(3) Provided further that wherever these rules are in conflict with safety, security, health or environmental codes, or Bureau of Energy Efficiency's Standard and Labelling for equipment or appliances and Star Rating Program for buildings and if they are more stringent than the requirement of these rules, then they shall prevail over these rules

FORM I

APPLICATION FOR BUILDING PERMIT FOR ERECTION OF NEW BUILDING/ BUILDING COMPLEX OR RE-ERECTION OF EXISTING BUILDING/ BUILDING COMPLEX (ADDITION/ ALTERATION) INTENDED TO HAVE COMPLIANCE WITH MP-ECBC

Date: __/__/____

To,

The Designation
Name of Organisation
Address

Subject: Application for erection/re-erection of MP-ECBC compliant building

Location details:

Owner Name: _____
Application(Ref.) Number: _____
Scheme: _____
City: _____
Pincode: _____
Building Type: _____
Plot/Block Number: _____
Street: _____
District: _____
Block Number:_____

Dear Sir,

I/we hereby submit intend to erect/ re-erect a building which will be eligible for MP-ECBC compliance. We have assigned an Empanelled Energy Auditor (Building) for this project, named as Mr./Ms. _____ having his/her Registration number: _____.

The relevant documents for this project are enclosed as:

1. Approved construction documents and compliance forms together with check-lists incorporating necessary measures as mentioned in MP-ECBC and its Rules
2. Form-II duly signed by Empanelled Energy Auditor (Building)

I/we understand that the proposed building attracts the provisions of MP-ECBC and its Rules for design, construction and liasoning and I/we are bound to follow those provision. In case of any deviation, I/We shall indemnify the loss to the relevant authority.

Yours faithfully

Name of Owner

Name of Organisation

(Seal and Signature)

Copy to: Designation, name of Department

FORM II

CERTIFICATE OF COMPLIANCE or NON-COMPLIANCE

(Phase - Design)

Date: __/__/____

To,

The Designation
Name of Organisation
Address

Subject: Assurance of compliance for the building/ building complex-

Location details:

Owner Name: _____ **Building Type: _____**
Application(Ref.) Number: _____ **Plot/ Block Number: _____**
Scheme: _____ **Street: _____**
City: _____ **District: _____**
Pincode: _____ **Block Number:_____**

Dear Sir,

I Mr./Ms. _____ a registered Empanelled Energy Auditor (Building) with registration no._____ under the Energy Conservation Act 2001 (52 of 2001) and Iam authorized to scrutinize and verify the MP-ECBC compliant building form design to post-occupancy.

During design phase I have scrutinized all the necessary documents pertaining to MP-ECBC and its Rules. I do ensure that necessary checklist, forms and construction documents are verified and submitted to client for further process.

☐ **I hereby do certify that- I have NO OBJECTION for aforesaid proposed building/ building complex as per the requirement of MP-ECBC and its Rules. For the same approved checklists, construction documents are attached herewith as Annexure-(*number*)**

Or

☐ **I hereby do certify that- I have OBJECTION for aforesaid proposed building/ building complex as per the requirement of MP-ECBC and its Rules, relevant details are briefed in FORM-IV. For the same desired checklists, construction documents are attached herewith as Annexure-(*number*).**

Name of EEA (Building)
Registration Number
(Seal and Signature)

Copy to: Designation, name of Department

FORM III

NOTICE TO INITIATE ERECTION/RE-ERECTION FOR PROPOSED MP-ECBC COMPLIANT BUILDING/ BUILDING COMPLEX

Date: __/__/____

To,

The Designation
Name of Organisation
Address

Subject: Intention for initiating the construction of proposed MP-ECBC compliant building/ building complex

Building/Building Complex details:

Owner Name: _____	**Building Type: _____**
Application(Ref.) Number: _____	**Plot/ Block Number: _____**
Scheme: _____	**Street: _____**
City: _____	**District: _____**
Pincode: _____	**Block Number:_____**

Dear Sir,

I am/we owner of aforesaid proposed building/building complex, hereby submit the construction documents duly signed by EEA (Building) attached as Annexure-(*number*). Further I/we undertake the responsibility of the documents relevant to MP-ECBC attached herewith and do confirm that the proposed building/building complex will be constructed as per this annexed documents. If any information submitted is found to be incorrect, I/we shall indemnify the loss to the authority having jurisdiction.

For aforesaid proposed building/building, I/we are intended to begin construction from (number) day of (name of month) in (*year).* Kindly grant us the permission for the same to initiate the desired construction.

Yours faithfully
Name of EEA (Building)
Registration Number
(Seal and Signature)

Copy to: Designation, name of Department

FORM IV

CERTIFICATE OF COMPLIANCE or NON-COMPLIANCE

(Phase – Construction/ Post-Construction)

Date: __/__/____

To,

The Designation
Name of Organisation
Address

Subject: Certificate of compliance for the MP-ECBC compliant building/ building complex-

Location details:

Owner Name: _____ **Building Type: _____**
Application(Ref.) Number: _____ **Plot/ Block Number: _____**
Scheme: _____ **Street: _____**
City: _____ **District: _____**
Pincode: _____ **Block Number:_____**

Dear Sir,

I Mr./Ms. _____ a registered Empanelled Energy Auditor (Building) with registration no._____ under the Energy Conservation Act 2001 (52 of 2001) and I am authorized to scrutinize and verify the MP-ECBC compliant building form design to post-occupancy.

During construction/post-occupancy phase I have scrutinized all the compliance documents and pertaining to MP-ECBC and its Rules. I do ensure that necessary checklist, forms and construction documents are verified and submitted to client for further process.

☐ **I hereby do certify that- I have NO OBJECTION for aforesaid proposed building/ building complex as per the requirement of MP-ECBC and its Rules. For the same approved checklists, construction documents are attached herewith as Annexure-(*number*)**

Or

☐ **I hereby do certify that- I have OBJECTION for aforesaid proposed building/ building complex as per the requirement of MP-ECBC and its Rules, relevant details are briefed in FORM-IV. For the same desired checklists, construction documents are attached herewith as Annexure-(*number*).**

Yours faithfully
Name of EEA (Building)
Registration Number
(Seal and Signature)

Copy to: Designation, name of Department

FORM V

NOTICE OF WORK COMPLETION

To,

The Designation
Name of Organisation
Address

Subject: Assurance of completion of erection/re-erection for the MP-ECBC compliant building/ building complex-

Location details:

Owner Name: _____ **Building Type: _____**
Application(Ref.) Number: _____ **Plot/ Block Number: _____**
Scheme: _____ **Street: _____**
City: _____ **District: _____**
Pin-code: _____ **Block Number: _____**

Dear Sir,

I Mr./Ms. _____ a registered Empanelled Energy Auditor (Building) with registration no._____ under the Energy Conservation Act 2001 (52 of 2001) and I am authorized to scrutinize and verify the MP-ECBC compliant building form design phase till post-occupancy phase.

During construction phase I have scrutinized all the compliance documents and pertaining to MP-ECBC and its Rules. I do ensure that duly signed checklist, forms and construction documents were verified and submitted during the design and construction phase, including revision or non-revisions made during this tenure.

Further I hereby do assure that – the design and construction were executed in compliance with MP-ECBC and its Rules. And work have been completed on date__/__/_____ and would request you to initiate process for issue of occupancy certificate, as building/building complex is willing to occupy spaces from date__/__/_____.

Yours faithfully
Name of EEA (Building)
Registration Number
(Seal and Signature)

Copy to: Designation, name of Department

Checklist-1

1(a) ENVELOPE SUMMARY

Project Info	Project Address	Date
	Project Built-up Area (m^2)	For Departmental Use
	Project Above-grade Area (m^2)	
	Project Conditioned Area (m^2)	
	Applicant Name and Address	
	Project Climatic Zones	

Building Classification	Hospital		Assembly		Business	
	Health Care		Shopping Complex		Educational	

Project Description	New building		Addition		Alteration	
	Self-occupied		Core and Shell		Mixed-use	
Compliance is sought for Energy Efficiency level	ECBC Compliant		ECBC+ Compliant		Super ECBC Compliant	
					EPI Ratio	

Compliance Approach	Prescriptive Method		Whole building Performance Method		Building Trade-off Method-Envelope Compliance	

Building Envelope				
Vertical Fenestration Area Calculation	Total Vertical Fenestration Area (rough opening) / Gross Exterior Wall Area	*100	=	% window to wall ratio (WWR)
			=	
Skylight Area Calculation	Total Skylight Area (rough opening) / Gross Exterior Wall Area	*100	=	% skylight to roof ratio (SRR)
			=	

Opaque Assembly	
Wall (Minimum Insulation U-factor)	
Roof (Minimum Insulation U-factor)	

	Daylight Summary	
%above-grade floor area meeting the UDI requirement for 90% of the potential daylit time in a year		

Cool Roof	
Solar Reflectance	
Emittance	

Wall Assembly	
Material	R-value

Fenestration	
Vertical	
Maximum U-factor	
Maximum SHGC (or SC)	
Minimum VLT	
Overhang / Side-fins / Box Frame Projection (yes or No)	
If yes, enter Projection Factor for each orientation and effective SHGC	
Skylight	
Maximum U-factor	
Maximum SHGC (or SC)	

Checklist-1

1(b) ENVELOPE CHECKLIST

Project Address						Date	
Applicability			Code Section	Component	Information Required	Location on Plans	Building Department Notes
Yes	No	N/A					
Mandatory Provisions (Section 4.2)							
			4.2.1	Fenestration Rating	Specify reference standard		
			4.2.1.1	U-Factor	Specify reference standard		
			4.2.1.2	SHGC	Specify reference standard		
			4.2.2	Opaque U-factors	Specify reference standard		
			4.2.3	Day-lighting	Indicate sealing, clauking, gasketing, and weather stripping		
			4.2.4	Building Envelope Sealing			

Prescriptive Compliance Option (Section 4.3)							
			4.2.5	Roofs	Specify implemented U-factor		

			4.2.6	Opaque External Wall	Specify implemented U-factor		
			4.3.1	Vertical Fenestration	(1) Indicate U-factors on fenestration schedule. Indicate if values are rated or default. If values are default, then specify frame type, glazing layers, gap-width, low-e. (2) indicate SHGC or SC on fenestration schedule. Indicate if values are rated or default. (3) Indicate VLT of fenestration schedule. Indicate if values are rated or default. (4) Indicate if overhangs or side-fins or box-frames projections are used for compliance purpose. If so provide projection factor calculation and equivalent SHGC calculation		
			4.3.2	Fenestration U-factor exemption	Specify if applicable, specify unconditioned percentage, and specify incorporated specifications		

			4.3.2	Skylights	(1) Indicate U-factors on fenestration schedule. Indicate if values are rated or default. If values are default, then specify frame type, glazing layers, gap-width, low-e. (2) indicate SHGC or SC on fenestration schedule. Indicate if values are rated or reference standards		
			4.3.3.1	Vegetative cool roof	Specify the solar reflectance, emittance and reference standards		

Building Envelope Trade-off Option (Section 4.3.4)							
					Provide calculations		

Checklist-2

2(a) COMFORT SYSTEM AND CONTROL SUMMARY

Project Info	Project Address	Date
	Project Built-up Area (m^2)	For Departmental Use
	Project Above-grade Area (m^2)	
	Project Conditioned Area (m^2)	
	Applicant Name and Address	
	Project Climatic Zones	

Project Description						
Briefly describe comfort system type and features	Natural ventilation, mechanical ventilation, low energy comfort system, heating cooling mechanical equipment, percentage area distribution for the installed system, and related information					

Compliance Option	System efficiency	Prescriptive Method	Whole Building Performance Method

Equipment Schedules	The following information is required to be incorporated with the mechanical equipment schedules on the plants. For projects without plans, fill in the required information below

Cooling Equipment Schedule

Equip. ID	Brand Name and Model No.	Capacity (kW)	Testing Standards	OSA CFM or Economizer	Efficiency (COP and IPLV)	Location

Heating Equipment Schedule						
Equip. ID	Brand Name and Model No.	Capacity (kW)	Testing Standards	OSA CFM or Economizer	Input (kW)/Output (kW)	Efficiency

Fan Equipment Schedule						
Equip. ID	Brand Name and Model No.	Testing Standards	SP	Efficiency	Flow Control	Location Service

Checklist-2

2(b) COMFORT SYSTEM AND CONTROL CHECKLIST

Applicability			Code Section	Component	Information Required	Location on Plans	Building Department Notes
Yes	No	N/A					

Mandatory Provisions (Section 5.2)							
			5.2.1	Ventilation	Indicate all habitable spaces are ventilated with outdoor air in accordance with #5.2.1 and guidelines specified in NBC		
			5.2.2	Minimum Space Conditioning Equipment Efficiencies	Provide equipment schedule with type, capacity, efficiency		
			5.2.3	Controls			
			5.2.3.1	Timeclock	Indicate thermostat with night setback, 3 different day types per week, and 2-hour manual override, capable of retaining programming and time-setting during loss of power for a period of at least 10hours		
			5.2.3.2	Temperature Controls	Indicate thermostats are interlocked to prevent simultaneous heating and cooling, where separate heating and cooling systems are there		
			5.2.3.3	Occupancy Controls	Indicate occupancy controls for space types mentioned in #5.2.3.3		
			5.2.3.4	Fan Controls	Indicate two-speed motor, pony motor, or variable speed drive to control the fans and controls shall be capable to reduce the fan speed to at least two-third of installed fan power		
			5.2.3.5	Dampers	Indicate all air supply and exhaust equipment's having VFD shall have dampers that automatically close upon the situations mentioend in #5.2.3.5		

			5.2.4	Additional Controls for ECBC+ Building			
			5.2.4.1	Centralized Demand Shed Controls	Indicate the building has a building management system, with all mechanical cooling and heating systems having PLC to the zone level shall have the control capabilities mentioned in #5.2.4.1		
			5.2.4.2	Supply Air Temperature reset	Indicate multi zone mechanical cooling and heating systems shall have the control to automatically reset supply air temperature in response to building loads or outdoor air temperature by at least 25% of the difference between design supply air temperature and the design room air temperature		
			5.2.4.3	Chilled Water Temperature	Indicate chilled water systems exceeding 350kW shall have controls to automatically reset supply water temperature by representative building loads or by outdoor air temperature		
			5.2.5	Additional Controls for SuperECBC Building	Indicate that the mechanical systems comply with #5.2.4 and #5.2.5		
			5.2.5.1	Variable Air Volume Fan Control	Indicate Fans in VAV systems shall have controls or devices to limit fan motor demand as per #5.2.5.1		
			5.2.6	Piping and Duct work	Indicate sealing, caulking, gasketing, and weather stripping		
			5.2.6.1	Piping Insulation	Indicate R-value of insulation		

			5.2.6.2	Ductwork and Plenum insulation	Indicate R-value of insulation
			5.2.7	System balancing	Indicate R-value of insulation
			5.2.8	Condensers	Indicate location of condenser and source of water used for condenser
			5.2.9	Service Hot water hteating	
			5.2.9.1	Solar Water Heating	Indicate all Hotels and hospitals have solar water heating equipment installed for hotwater design capacity as per #5.2.9.1
			5.2.9.2	Heating Equipment Efficiency	
			5.2.9.3	Supplementary Water Heating System	Indicate supplementary heating system is designed in consideration with #5.2.9.3
			5.2.9.4	Piping Insulation	Indicate the piping insulation is compliant with #5.2.6.1
			5.2.9.5	Heat Traps	Indicate vertical pipe risers serving water heaters and storage tanks are as per #5.2.9.5
			5.2.9.6	Swimming Pools	Indicate the heated pools are provided with a vapor retardent pool cover on the water surface and temperature control and minimum insulation value as per #5.2.9.6

Prescriptive Compliance Option (section 5.3)

			5.3.1	Fans	Indicate fan type, motor efficiency and mechanical efficiency
			5.3.2	Pumps	Indicate pump type (Primary, secondary, and condenser), its total installed capacity and efficiency
			5.3.3	Cooling Towers	Indicate cooling tower type installed capacity
			5.3.4	Air-economizer (ECBC/ECBC+/Super ECBC)	Indicate air-economiser is capable of modulation outside-air and return-air dampers to supply minimum 50% of design supply air quantity as outside-air for respective building type
			5.3.4	Water-economizer (ECBC/ECBC+/Super ECBC)	Indicate water-economizer is capable of providing 50% of expected system cooling load at outside air temperature of 10oC dry-bulb/7.2oC wet-bulb and below, if the designed building is a respective building type
			5.3.4.3	Partial Cooling	Indicate where required by #5.3.4 economizers shall be capable of providing partial cooling even when additional mechanical cooling is required to meet the cooling load
			5.3.4.4	Controls	Indicate air economizers are equipped with controls as specified in #5.3.4.4
			5.3.9	Testing	Indicate air-side economizer have been tested as per the requirement specified
			5.3.5	Variable Flow Hydronic Systems	
			5.3.5.1	Variable Fluid Flow	Indicate design flow rate of HVAC pumping system

			5.3.5.2	Isolation Valves	Indicate water cooled air-conditioning have two-way automatic isolation valves and pump motors greater than or equal to 3.7kW is controlled by variable speed drives
			5.3.5.3	Variable Speed Drives	Indicate chilled water or condenser water system comply with either #5.3.5.1. or #5.3.5.2
			5.3.5.4	Heat Recovery	Indicate for all hospitality and healthcare, heat recovery effectiveness, and efficiency of oil and gas fired boilers
			5.4	System Efficiency- Alternate compliance approach	Attach simulation report
			5.5	Low energy comfort systems	Indicate system type and list the exemption claimed

Checklist-3

3(a) LIGHTING AND CONTROLS SUMMARY

Project Info	Project Address	Date
	Project Built-up Area (m2)	For Building Department Use
	Project Above-grade Area (m2)	
	Project Conditioned Area (m2)	
	Applicant Name and Address	
	Project Climatic Zones	

Compliance option	Space by space method			Whole building performance method	

Maximum allowed lighting power (Interior, section 6.3.2 or 6.3.3)						
Location (Floor/room no.)	Occupancy Description		Allowed Lighting Power Density (Watts/m2)		Area (in m2)	Allowed LPD*area
					Total Allowed watts	

Proposed Lighting Power (Interior)				
Location (Floor/room no.)	Fixture Description	No. of Fixtures	Watts per fixture	Watts Proposed
Total proposed watts shall not exceed total allowed watts for interior		**Total Proposed watts**		

Maximum Allowed Lighting Wattage (Exterior, Section 6.3.5)				
Location (Floor/room no.)	Description	Allowed Lighting Power Density (Watts/m2)	Area (in m2)	Allowed LPD*area
			Total Allowed watts	

Proposed Lighting Wattage (Exterior)

Location (Floor/room no.)	Occupancy Description	Allowed Lighting Power Density (Watts/m2)	Area (in m2)	Allowed LPD*area
	Total proposed watts may not exceed total allowed watts for exterior		Total proposed watts	

Checklist-3

3(b) LIGHTING AND CONTROLS CHECKLIST

Project Address		Date

Applicability			Code Section	Component	Information Required	Location on Plans	Building Department Notes
Yes	No	N/A					

Lighting and Controls

Mandatory Provisions (section 6.2)					
			6.2.1	Lighting Controls	
			6.2.1.1	Automatic Shutoff	Indicate automatic shutoff locations or occupancy sensors
			6.2.1.2	Space Control	Provide schedule with type, indicate locations
			6.2.1.3	Daylight Zones	Provide manual or automatic control device schedule with type and features, indicate locations
			6.2.1.4	Centralized Controls ECBC+ and SuperECBC Buildings	Provide centralized control system schedule with type and features, indicate locations

			6.2.1.5	Ext. Lighting control	Indicate photo-sensor or astronomical time
			6.2.1.6	Additional control	Provide schedule with type, indicate locations
			6.2.3	Exit Signs	Indicate wattage per face of Exit signs

Prescriptive Interior Lighting Power Compliance Option (Section 6.3)					
			6.3	LPD Compliance	Indicate whether project is complying with the building area method (6.3.2) or the space function method (6.3.3)
			6.3.2	Building area method	Provide lighting schedule with wattage of lamp and ballast and number of fixtures. Document all exemptions
			6.3.2	Space function method	Provide lighting schedule with wattage of lamp and ballast and number of fixtures. Document all exemptions
			6.3.3	Luminaries wattage	Indicate the wattage of installed luminaries on the floor plan, In case of luminaries containing permanently installed ballast, the operating input wattage has to be provided, wither from manufacturers catalogue or values from independent testing laboratory reports

Prescriptive Exterior Lighting Power Compliance Option (section 6.3.5)

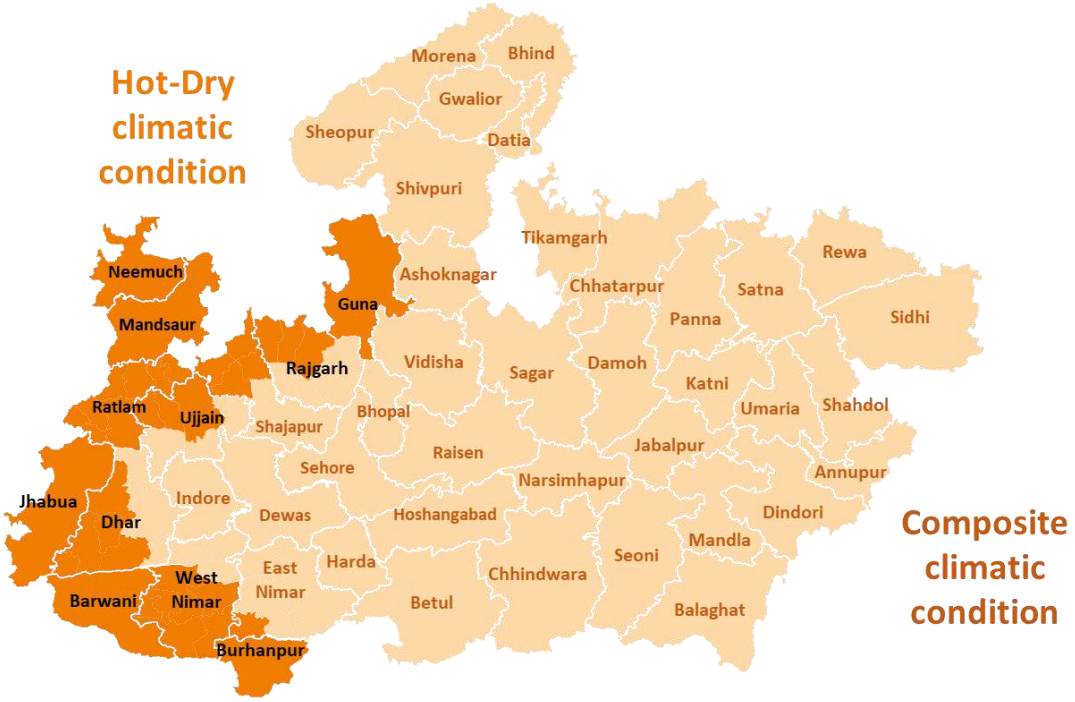
			6.4	Exterior Lighting	Provide lighting schedule with wattage of lamp and ballast and number of fixtures. Document all exceptions

ANNEXURE - I

This annexure contains Madhya Pradesh-Energy Conservation Building Code, which has been amended for the state of Madhya Pradesh as per the local climatic conditions and situations

ANNEXURE-II

Climatic Classification of Madhya Pradesh



Sr. No.	Division	District	City	Climatic Condition	Nearest Climatic available epw file
1	Bhopal	Bhopal	Bhopal	Composite	Bhopal
2			Berasia	Composite	Bhopal
3			Kolar	Composite	Bhopal
4		Sehore	Sehore	Composite	Bhopal
5			Ashtha	Composite	Bhopal
6			Budhni	Composite	Bhopal
7			Ichchawar	Composite	Bhopal
8			Jawar	Composite	Bhopal
9			Nasrullaganj	Composite	Bhopal
10			Rehti	Composite	Bhopal
11		Raisen	Raisen	Composite	Bhopal
12			Goharganj	Composite	Bhopal
13			Mandideep	Composite	Bhopal
14			Begamganj	Composite	Bhopal
15			Gairaganj	Composite	Bhopal
16			Silwani	Composite	Bhopal

17			Bareli	Composite	Bhopal
18			Udaipura	Composite	Bhopal
19			Badi	Composite	Bhopal
20		Rajgarh	Jeerapur	Hot-dry	Bhopal
21			Khilchipur	Hot-dry	Bhopal
22			Rajgarh	Hot-dry	Bhopal
23			Narsinghgarh	Hot-dry	Bhopal
24			Biaora	Hot-dry	Bhopal
25			Pachore	Hot-dry	Bhopal
26			Sarangpur	Hot-dry	Bhopal
27		Vidisha	Vidisha	Composite	Bhopal
28			GanjBasoda	Composite	Bhopal
29			Kurwari	Composite	Bhopal
30			Lateri	Composite	Bhopal
31			Sironj	Composite	Bhopal
32	Narmadapuram	Hoshangabad	Hoshangabad	Composite	Bhopal
33			Itarsi	Composite	Bhopal
34			Seoni-Malwa	Composite	Bhopal
35			Pipariya	Composite	Bhopal
36			Sohagpur	Composite	Bhopal
37			Babai	Composite	Bhopal
38			Bankhedi	Composite	Bhopal
39			Dolariya	Composite	Bhopal
40		Betul	Betul	Composite	Bhopal
41			Sarni	Composite	Bhopal
42			Multai	Composite	Bhopal
43			Amla	Composite	Bhopal
44			Chicholi	Composite	Bhopal
45			GhoraDongri	Composite	Bhopal
46			Athner	Composite	Bhopal
47			Bhainsdehi	Composite	Bhopal
48			Betul Bazaar	Composite	Bhopal
49		Harda	Harda	Composite	Bhopal
50			Rehatgaon	Composite	Bhopal
51			Khirkiya	Composite	Bhopal
52			Sirali	Composite	Bhopal
53			Timarni	Composite	Bhopal
54			Handiya	Composite	Bhopal
55	Gwalior	Gwalior	Gwalior	Composite	Gwalior
56			Dabra	Composite	Gwalior
57			Bhitarwar	Composite	Gwalior
58			Chinour	Composite	Gwalior
59		Shivpuri	Shivpuri	Composite	Gwalior
60			Pichchore	Composite	Gwalior
61			Pohri	Composite	Gwalior
62			Narwar	Composite	Gwalior

63			Karera	Composite	Gwalior
64			Khaniyadhana	Composite	Gwalior
65			Badarwas	Composite	Gwalior
66			Kolaras	Composite	Gwalior
67		Guna	Guna	Hot-dry	Gwalior
68			Bamori	Hot-dry	Gwalior
69			Raghogarh	Hot-dry	Gwalior
70			Aron	Hot-dry	Gwalior
71			Chachaura	Hot-dry	Gwalior
72			Kumbhraj	Hot-dry	Gwalior
73			Maksoodangarh	Hot-dry	Gwalior
74		Ashoknagar	Ashoknagar	Composite	Gwalior
75			Mungaoli	Composite	Gwalior
76			Isagarh	Composite	Gwalior
77			Chanderi	Composite	Gwalior
78			Shadhora	Composite	Gwalior
79		Datia	Datia	Composite	Gwalior
80			Bhander	Composite	Gwalior
81			Indergarh	Composite	Gwalior
82			Seondha	Composite	Gwalior
83	Chambal	Sheopur	Sheopur	Composite	Gwalior
84			Vijaypur	Composite	Gwalior
85			Karahal	Composite	Gwalior
86			Badoda	Composite	Gwalior
87			Beerpur	Composite	Gwalior
88		Morena	Morena	Composite	Gwalior
89			Joura	Composite	Gwalior
90			Ambah	Composite	Gwalior
91			Porsa	Composite	Gwalior
92			Sabalgarh	Composite	Gwalior
93			Kailaras	Composite	Gwalior
94		Bhind	Bhind	Composite	Gwalior
95			Gormi	Composite	Gwalior
96			Ater	Composite	Gwalior
97			Ron	Composite	Gwalior
98			Mihona	Composite	Gwalior
99			Mehgaon	Composite	Gwalior
100			Gohad	Composite	Gwalior
101			Lahar	Composite	Gwalior
102	Jabalpur	Jabalpur	Jabalpur	Composite	Jabalpur
103			Panagar	Composite	Jabalpur
104			Shahpura	Composite	Jabalpur
105			Sihora	Composite	Jabalpur
106			Majholi	Composite	Jabalpur
107			Patan	Composite	Jabalpur
108			Kundam	Composite	Jabalpur

109		Katni	Katni	Composite	Jabalpur
110			Murwara	Composite	Jabalpur
111			Vijayraghavgarh	Composite	Jabalpur
112			Bahoriband	Composite	Jabalpur
113			Dhimarkheda	Composite	Jabalpur
114			Rithi	Composite	Jabalpur
115			Badwara	Composite	Jabalpur
116			Barhi	Composite	Jabalpur
117		Narsimhapur	Narsimhapur	Composite	Jabalpur
118			Gotegaon	Composite	Jabalpur
119			Kareli	Composite	Jabalpur
120			Tendukheda	Composite	Jabalpur
121			Gadarwada	Composite	Jabalpur
122		Chhindwara	Chhindwara	Composite	Jabalpur
123			Harrai	Composite	Jabalpur
124			Padhurna	Composite	Jabalpur
125			Tamia	Composite	Jabalpur
126			Dongar Parasia	Composite	Jabalpur
127			Amarwara	Composite	Jabalpur
128			Jamai	Composite	Jabalpur
129			Umreth	Composite	Jabalpur
130			Damua	Composite	Jabalpur
131			Chaurai	Composite	Jabalpur
132			Junnardeo	Composite	Jabalpur
133			Mohkhed	Composite	Jabalpur
134			Sausar	Composite	Jabalpur
135			Bichchua	Composite	Jabalpur
136		Seoni	Seoni	Composite	Jabalpur
137			Lakhnadon	Composite	Jabalpur
138			Barghat	Composite	Jabalpur
139			Keolari	Composite	Jabalpur
140			Ghansaur	Composite	Jabalpur
141			Chhapara	Composite	Jabalpur
142			Kural	Composite	Jabalpur
143			Dhanora	Composite	Jabalpur
144		Mandla	Mandla	Composite	Jabalpur
145			Bichchiya	Composite	Jabalpur
146			Ghugari	Composite	Jabalpur
147			Nainpur	Composite	Jabalpur
148			Niwas	Composite	Jabalpur
149			Narayanganj	Composite	Jabalpur
150		Balaghat	Balaghat	Composite	Jabalpur
151			Baiher	Composite	Jabalpur
152			Malanjkhand	Composite	Jabalpur
153			Lanji	Composite	Jabalpur
154			Waraseoni	Composite	Jabalpur

155			Kirnapur	Composite	Jabalpur
156			Laibarra	Composite	Jabalpur
157			Khairlanji	Composite	Jabalpur
158			Paraswada	Composite	Jabalpur
159			Katangi	Composite	Jabalpur
160			Tirodi	Composite	Jabalpur
161	**Sagar**	**Sagar**	Sagar	Composite	Jabalpur
162			Banda	Composite	Jabalpur
163			Bina	Composite	Jabalpur
164			Khurai	Composite	Jabalpur
165			Deori	Composite	Jabalpur
166			Malthon	Composite	Jabalpur
167			Rehli	Composite	Jabalpur
168			Shahgarh	Composite	Jabalpur
169			Rahatgarh	Composite	Jabalpur
170			Garhakota	Composite	Jabalpur
171			Kesli	Composite	Jabalpur
172		**Damoh**	Damoh	Composite	Jabalpur
173			Patharia	Composite	Jabalpur
174			Jabera	Composite	Jabalpur
175			Tendukheda	Composite	Jabalpur
176			Hatta	Composite	Jabalpur
177			Batiyagarh	Composite	Jabalpur
178			Patera	Composite	Jabalpur
179		**Panna**	Panna	Composite	Jabalpur
180			Ajaigarh	Composite	Jabalpur
181			Pawai	Composite	Jabalpur
182			Gunnor	Composite	Jabalpur
183			Amanganj	Composite	Jabalpur
184			Shahnagar	Composite	Jabalpur
185			Devendranagar	Composite	Jabalpur
186			Rajpura	Composite	Jabalpur
187		**Chhatarpur**	Chhatarpur	Composite	Jabalpur
188			Bada malhera	Composite	Jabalpur
189			Bijawar	Composite	Jabalpur
190			Buxwaha	Composite	Jabalpur
191			Chandla	Composite	Jabalpur
192			Gaurihar	Composite	Jabalpur
193			Laundi	Composite	Jabalpur
194			Maharajpur	Composite	Jabalpur
195			Nogaon	Composite	Jabalpur
196			Rajnagar	Composite	Jabalpur
197		**Tikamgarh**	Tikamgarh	Composite	Jabalpur
198			Palera	Composite	Jabalpur
199			Jatara	Composite	Jabalpur
200			Prithvipur	Composite	Jabalpur

201			Niwari	Composite	Jabalpur
202			Baldeogarh	Composite	Jabalpur
203			Khargapur	Composite	Jabalpur
204			Mohangarh	Composite	Jabalpur
205			Orchha	Composite	Jabalpur
206	Rewa	Rewa	Rewa	Composite	Jabalpur
207			Huzur	Composite	Jabalpur
208			Hanumana	Composite	Jabalpur
209			Teonthar	Composite	Jabalpur
210			Mangawan	Composite	Jabalpur
211			Jawa	Composite	Jabalpur
212			Sirmour	Composite	Jabalpur
213			Mauganj	Composite	Jabalpur
214			Naigarh	Composite	Jabalpur
215			Semaria	Composite	Jabalpur
216			Gurh	Composite	Jabalpur
217			Rajpur - Karchuliyan	Composite	Jabalpur
218		Singhrauli	Singhrauli	Composite	Jabalpur
219			Chitrangi	Composite	Jabalpur
220			Deosar	Composite	Jabalpur
221		Sidhi	Sidhi	Composite	Jabalpur
222			Gopadbanas	Composite	Jabalpur
223			Sihawal	Composite	Jabalpur
224			Rampur Naikin	Composite	Jabalpur
225			Majhauli	Composite	Jabalpur
226			Churhat	Composite	Jabalpur
227			Kusmi	Composite	Jabalpur
228		Satna	Satna	Composite	Jabalpur
229			Raghurannagar	Composite	Jabalpur
230			Maihar	Composite	Jabalpur
231			Nagod	Composite	Jabalpur
232			Amarpatan	Composite	Jabalpur
233			Uchahara	Composite	Jabalpur
234			Rampur Baghelan	Composite	Jabalpur
235			Ramnagar	Composite	Jabalpur
236			Majhgawan	Composite	Jabalpur
237			Birsinghpur	Composite	Jabalpur
238			Kotar	Composite	Jabalpur
239	Shahdol	Shahdol	Shahdol	Composite	Jabalpur
240			Sohagpur	Composite	Jabalpur
241			Beohari	Composite	Jabalpur
242			Jaisinghnagar	Composite	Jabalpur
243			Dhanpuri	Composite	Jabalpur
244			Jaitpur	Composite	Jabalpur
245		Umaria	Umaria	Composite	Jabalpur

246			Manpur	Composite	Jabalpur
247			Bandhogarh	Composite	Jabalpur
248			Pali	Composite	Jabalpur
249			Chandia	Composite	Jabalpur
250			Nowrozabad	Composite	Jabalpur
251		Dindori	Dindori	Composite	Jabalpur
252			Shahpura	Composite	Jabalpur
253		Anuppur	Anuppur	Composite	Jabalpur
254			Pushparajgarh	Composite	Jabalpur
255			Pasan	Composite	Jabalpur
256			Kotma	Composite	Jabalpur
257			Jaithari	Composite	Jabalpur
258	Indore	Indore	Indore	Hot-dry	Indore
259			Mhow	Composite	Indore
260			Depalpur	Composite	Indore
261			Sawer	Composite	Indore
262			Hatod	Composite	Indore
263		Dhar	Dhar	Hot-dry	Indore
264			Kukshi	Hot-dry	Indore
265			Manawar	Hot-dry	Indore
266			Sardarpur	Hot-dry	Indore
267			Barwani	Hot-dry	Indore
268			Badnawar	Composite	Indore
269			Dharampuri	Composite	Indore
270			Gandhwani	Composite	Indore
271			Dahi	Composite	Indore
272		Alirajpur	Alirajpur	Hot-dry	Indore
273			Jobat	Hot-dry	Indore
274			Bhavra	Hot-dry	Indore
275		Jhabua	Jhabua	Hot-dry	Indore
276			Petlawad	Hot-dry	Indore
277			Thandla	Hot-dry	Indore
278			Meghnagar	Hot-dry	Indore
279			Ranapur	Hot-dry	Indore
280		Khargone	Khargone	Hot-dry	Indore
281			Barwaha	Composite	Indore
282			Bhagwanpura	Hot-dry	Indore
283			Bhikangaon	Hot-dry	Indore
284			Sanavad	Hot-dry	Indore
285			Gogaon	Hot-dry	Indore
286			Jhiranya	Hot-dry	Indore
287			Kasrawad	Hot-dry	Indore
288			Maheshwar	Composite	Indore
289			Segaon	Hot-dry	Indore
290		Barwani	Barwani	Hot-dry	Indore

291			Sendhwa	Hot-dry	Indore
292			Rajpur	Hot-dry	Indore
293			Pati	Hot-dry	Indore
294			Pansemal	Hot-dry	Indore
295			Varla	Hot-dry	Indore
296			Niwali	Hot-dry	Indore
297			Anjad	Hot-dry	Indore
298			Thikri	Hot-dry	Indore
299		Khandwa	Khandwa	Hot-dry	Indore
300			Harsud	Composite	Indore
301			Khalwa	Hot-dry	Indore
302			Pandhana	Hot-dry	Indore
303			Punasa	Composite	Indore
304		Burhanpur	Burhanpur	Hot-dry	Indore
305			Nepanagar	Hot-dry	Indore
306			Khaknar	Hot-dry	Indore
307	Ujjain	Ujjain	Ujjain	Composite	Indore
308			Badnagar	Composite	Indore
309			Mahidpur	Hot-dry	Indore
310			Tarana	Composite	Indore
311			Nagda	Hot-dry	Indore
312			Khachrod	Hot-dry	Indore
313			Ghatiya	Composite	Indore
314		Dewas	Dewas	Composite	Indore
315			Bagli	Composite	Indore
316			Khategaon	Composite	Indore
317			Sonkatch	Composite	Indore
318			Tonkkhurd	Composite	Indore
319			Kannod	Composite	Indore
320			Hatpiplya	Composite	Indore
321		Ratlam	Ratlam	Composite	Indore
322			Jaora	Hot-dry	Indore
323			Piploda	Hot-dry	Indore
324			Sailana	Hot-dry	Indore
325			Alot	Hot-dry	Indore
326			Tal	Hot-dry	Indore
327			Rawti	Hot-dry	Indore
328			Bajna	Hot-dry	Indore
329		Shajapur	Shajapur	Composite	Indore
330			Shujalpur	Composite	Indore
331			Kalapipal	Composite	Indore
332			Gulana	Composite	Indore
333			Moman Badodiya	Composite	Indore
334			Agar	Composite	Indore

335			Susner	Hot-dry	Indore
336			Badod	Hot-dry	Indore
337			Nalkheda	Composite	Indore
338		Mandsaur	Mandsaur	Hot-dry	Indore
339			Malharganj	Hot-dry	Indore
340			Sitamau	Hot-dry	Indore
341			Bhanpura	Hot-dry	Indore
342			Garoth	Hot-dry	Indore
343			Shamgarh	Hot-dry	Indore
344			Daloda	Hot-dry	Indore
345			Suwasara	Hot-dry	Indore
346		Neemuch	Neemuch	Hot-dry	Indore
347			Manasa	Hot-dry	Indore
348			Jawad	Hot-dry	Indore
349			Singoli	Hot-dry	Indore
350			Jiran	Hot-dry	Indore

ANNEXURE-III

FORM SUBMITTAL FOR DEPARMENTS HAVING THEIR ROLES & RESPONSIBILITIES IN MP-ECBC

Below from to be filled by AUTHORITY HAVING JURISDICTION and share with MPUVNL and DISTRIBUTION LICENSEE via email on approval of document (to be shared instantaneously) also with official letter to be sent to relevant departments

TO BE FILLED BY AUTHORITY HAVING JURISDICTION as per MP-ECBC Rules		
Sr. No.	**Description**	**Details**
1	Unique Building Identification-Code	xxxxx
2.1	Connected Load of Building	100kW or greater
2.2	Or Building Contract Demand	120 kVA or greater
3	Building Type	Single Owned, Core and Shell or Mixed-use
4	Building classification as per §3.2, Applicability, MP-ECBC Rules	Hospitality, Health Care, Assembly, Business, and others
5	Total Building Built-up Area (in sq. m.)	
6	Total Building Area under §3.2, Applicability, MP-ECBC Rules	For Commercial building (not for area other than commercial buildings as per §3.2, Applicability, MP-ECBC Rules)
7	No. of Floor under §3.2, Applicability, MP-ECBC Rules	For Commercial building (not for floor other than commercial buildings as per §3.2, Applicability, MP-ECBC Rules)
8	Total Conditioned Area of Building (in sq. m.)	
9	Total unconditioned Area of Building (in sq. m.)	

10	Division	
11	District	
12	City/Town/Village	
13	Climatic Classification	Hot-dry, and Composite Climate
14	Date of Approval	
15	Authorized Signature	
16		
17		

*A copy of above letter with seal and signature needs to be shared with OWNER along with approval of BUILDING DRAWINGS

Below Form to be filled by DISTRIBUTION LICENSEE or by OWNER

(as per Rules-8.9 & Rules-11.4)

To be shared with MPUVNL and STEERING COMMITTEE MEMBER via email on approval for PERMANENT ELECTRICAL CONNECTION (to be shared instantaneously)

Also a copy of receipt shared by OWNER on UBID, while applying for NEW PERMANENT ELECTRICAL CONNECTION (which needs to be shared once, during first correspondence of each new UBID)

Sr. No.	**Description**	**For Single Owner / Mn**	
1	Unique Building Identification-Code (to be cross-checked with the email/letter shared by UADD)	Xxxxx	
2	Connected Load of Building (as per receipt share by Owner)	100kW or greater	Maximum Recorded Demand **(in KVA)**
3	Or Building Contract Demand (as per receipt share by Owner)	120 kVA or greater	
4	Building Type (as per receipt share by Owner)	Single Owned, Core and Shell or Mixed-use	
5	Building classification (as per receipt share by Owner)	Hospitality, Health Care, Assembly, or others	
6	Energy Consumption Details (in kWh); year	ex.: FY 2018-19	
6.1	April		
6.2	May		
6.3	June		
6.4	July		
6.5	August		

6.6	September		
6.7	October		
6.8	November		
6.9	December		
6.1	January		
6.11	February		
6.12	March		
7	Connection Type		
8	IVRS/Account ID		
9	Annual Average Unit Rate (in Rs./kWh)		

***Above sheet will be of 'Mn' nos.; preferably for section-14.7 and 16.7 of these rules**