OSHPD Preapproval of Manufacturer's Certification (OPM)

OSHPD <u>Preapproval</u> of Manufacturer's Certification (OPM) is a <u>voluntary</u> program.

Office of Statewide Health Planning and Development OSHPD

Facilities Development Division

The Building Department for California's Hospitals



Scope of OSHPD Preapproval of Manufacturer's Certification (OPM)

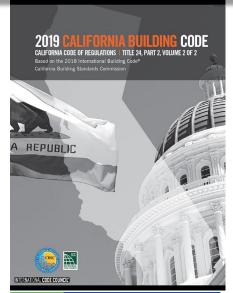
- OSHPD Preapproval of Manufacturer's Certification (OPM) is limited to:
 - Seismic design of supports and attachments for nonstructural components,
 - Seismic bracing of distribution systems,
 - Interior partition walls and suspended ceilings seismic bracing equivalent to those approved through OSHPD Preapproved Details (OPD).
- OPM is <u>NOT</u> a product/components approval program!





Basis of OSHPD Preapproval of Manufacturer's Certification (OPM)

- OSHPD Preapproval of Manufacturer's Certification (OPM) is based on:
 - California Health and Safety Code Section 129895.
 - Manufacturer's certification provisions of the CBC 2019 Section 1705A.13.2.
 - Manufacturer's certification provisions of ASCE 7-16 Section 13.2.1 Item # 2.





Minimum Design Loads and Associated Criteria for Buildings and Other Structures







Minimum Requirements for OPM

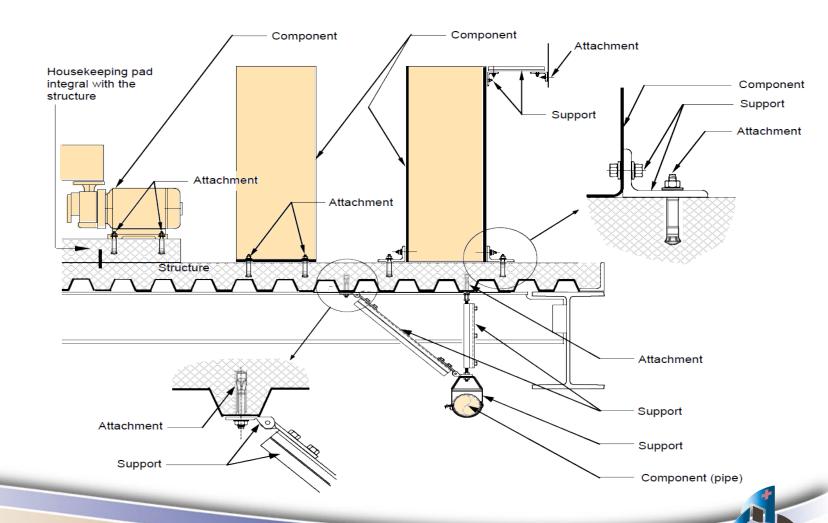
Design in accordance with the CBC 2019,

and/or

Testing in accordance with the CBC 2019.



What are Components, Supports, and Attachments?





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Do I need to include Entire Equipment Supports and Attachments within OPM?

•Yes!

•All parts of equipment supports (See ASCE 7-16 Section 13.6.4) and attachments that require design by the CBC 2019/ASCE 7-16 shall be included within the scope of OPM.



ASCE 7-16 Section 13.6.4: Component Supports

Mechanical and electrical component supports and the means by which they are attached to the component shall be designed for the forces and displacements determined in Sections 13.3.1 and 13.3.2. Such supports include structural members, braces, frames, skirts, legs, saddles, pedestals, cables, guys, stays, snubbers, tethers, and elements forged or cast as a part of the mechanical or electrical component.



What are Supports?

SUPPORTS: Those members, assemblies of members, or manufactured elements, including braces, frames, legs, lugs, snubbers, hangers, saddles, or struts, and associated fasteners that transmit loads between nonstructural components and their attachments to the structure.



What are Attachments?

ATTACHMENTS: Means by which components or supports of nonstructural components are secured or connected to the seismic force-resisting system of the structure. Such attachments include anchor bolts, welded connections, and mechanical fasteners.



When is Certificate of Compliance for Supports and Attachments Required?

- Certificate of Compliance for Supports and Attachments shall <u>ONLY</u> be required when:
 - Manufacturer's Certification is used for seismic design of supports and attachments;
 and
 - 1. Fabricator approval is used for manufacturing.



Certificate of Compliance for Components where Special Seismic Certification is NOT required

- Certificate of Compliance for Seismic Certification of Components, where Special Seismic Certification is NOT required:
 - Components commonly designed by calculations (e.g. those listed in ASCE 7-16 Table 13.5-1), such as storage racks, shall be justified by calculations;
 - 2. Mechanical and Electrical components (e.g. those listed in ASCE 7-16 Table 13.6-1) can be justified by reference to ANSI approved seismic design standards.
- Certificate of Compliance shall specify validity range for S_{DS} & z/h, and I_p.



Who provides Certificate of Compliance for Components?

- Manufacturer shall provide "Certificate of Compliance" for components <u>with</u> Special Seismic Certification in accordance with ASCE 7-16 Section 13.2.2.
- For components where Special Seismic Certification
 is NOT required by Code, "Certificate of Compliance"
 can be provided by manufacturers, designers or
 suppliers (H&SC #129895).
- The owner or owner's authorized agent shall submit certificate of compliance to OSHPD in accordance with the CBC 2019 Section 1704A.5.



Does OSHPD Consider Manufactured Equipment to be Fabricated Items?

- In general, NO!
- Fabricated Item <u>ONLY</u> include structural elements, components, supports, and attachments for which structural provisions of the CBSC require Quality Assurance/Quality Control (QA/QC), as defined in the CBSC 2019 Section 202.
- Manufactured equipment which are not subject to QA/QC by structural provisions of the code are not considered to be fabricated item for the CBC 2019 Section 1704A.2.5:
 - > Pump is not considered a fabricated item;
 - Skid mounted pump assembly will be considered a fabricated item (since skid requires QA/QC)



Do the Supports/Attachments Design need to Comply with the CBC 2019?

·Yes!

•Demand and capacity shall be based on the CBC 2019.



What is Mobile Equipment?

Mobile Equipment: Means equipment, with or without wheels or rollers, that is typically used in a different location than where it is stored and moved from one location in the structure to another during ordinary use. Mobile equipment includes items that require floor space or electrical and/or mechanical connections but are portable, such as wheeled items, portable items, office-type furnishings, and diagnostic or monitoring equipment.



OPM Submittal Requirements

- 1. Complete online application for preapproval (new or renewal).
- 2. Application filing fee of \$250.00 paid via credit card only.
 - Application fee must be paid prior to receiving preapproval number.
 - Application filing, review, and renewal fees are <u>non-refundable</u>.
- For equipment supports and attachments OPM, Manufacturer's <u>certified</u> <u>outline drawings</u> showing sizes, weights, locations of center of gravity (CG), and attachment requirements.
- 4. Supporting documents, test reports, drawings, product catalog, and calculations for review, and OPM to be approved.
- 5. All documents shall be **submitted electronically through electronic portal**.



OSHPD Contact for Additional Information about OPM

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How Much Change can be Made Before OPM Becomes Invalid?

OPM will be nullified when:

Design, construction, or quality control/quality assurance methods are <u>materially altered</u> as defined in the CAC 2019 Section 7-111.

<u>OR</u>

Strength, Stiffness, Size, Weight, Materials, Support, Orientation, or Manufacturer are changed/altered so that they are no longer equivalent to what was approved in the OPM.



Where Do I Find a Current List of OPMs?

OSHPD website:

http://www.oshpd.ca.gov/FDD/Pre-Approval/index.html



Can I Use the CBC 2001, 2007, or CBC 2010 based OPA's for the CBC 2013, 2016, or CBC 2019 based Projects?

No!





Can we Use the CBC 2013, 2016, or CBC 2019 OPMs for the CBC 2001, CBC 2007, or CBC 2010 based Projects?

Yes!





Can we Use the CBC 2013/2016 OPMs for the CBC 2019 Based Projects or Vice-Versa?

No!

- CBC 2013/2016 based OPMs cannot be used for the CBC 2019 projects.
- CBC 2019 based OPMs can be used for the CBC 2013/2016 projects.
- Only CBC 2019 based OPMs can be used for CBC 2019 based projects.
- Code used shall be the applicable code for the project.
 Requirements from the CBC 2013, CBC 2016, and CBC 2019 shall not be mixed in a single project.



Can Different Distribution System OPM's Be Used On a Pipe, Duct, Or Conduit?

No!

- Different distribution systems OPM should not be used for <u>a given run</u> of pipes, ducts, or conduits.
- Different distribution system OPM's are permitted on different runs of the distribution system but <u>all</u> braces on a particular run must be from the same OPM.





Can we Substitute Components in an OPM?

No!

Substitution of components in an OPM is not permitted, unless they are reviewed and approved by OSHPD for specific application.



Do we Need to Submit Anything to OSHPD for Review when OPM's are Used?

- Yes! OSHPD review is required:
 - To ensure that the appropriate detail has been selected/applied for each condition and for the actual substrate that it will be connected/attached to.
 - To ensure that supporting structure that are not part of the OPM's have adequate capacity.
 - For supports/attachments and supporting calculations that are not part of a pre-approved system. Many OPM's require the RDP to design certain elements in the load path.
 - OSHPD will not re-review what is already approved in the OPM, if it was approved for the code for which it is being used.



How Long will it take for OSHPD to review an OPM?

- OSHPD has a 80/40/40 Goal for OPM, except for Partition Walls, Suspended Ceilings, and Distribution Systems Seismic Bracing OPM!
 - New OPM Application Submittal shall be Reviewed within 80 days.
 - Response to Back Checks for OSHPD Comments will be Reviewed within 40 days.
 - Renewal Request for OPM (within the same code cycle) shall be Reviewed within 40 days.



What are the Turn Around Goals for Partition Walls, Suspended Ceilings, and Distribution Systems Seismic Bracing OPMs?

Depends on the Scope & Quality of Submittal!

- Turn around goals for Partition Walls, Suspended Ceilings, and Distribution Systems Seismic Bracing OPMs are negotiated on a case by case basis.
- Approval can take any where from 6-months to couple of years.
- Depends largely on the scope of the OPM, quality of submittal, and responsiveness of the OPM Owner.



Will OSHPD Distribute OPMs?

Yes!

 All approved OPMs shall be posted at OSHPD website.



Can I Get an OPM for Components Exempt by the CBC 2019 Sections 1617A.1.18 or 105.2?

Yes!

- OSHPD <u>does not recommend</u> OPM's for small components exempt from plan review by the CBC 2019 Sections 1617A.1.18 or 105.2.
- Exemptions from plan review requirements by the CBC 2019 shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of the code or any other laws or ordinances.





Can I Get an OPM for Vibration Isolators, Roof Curbs, or Concrete Anchors?

No!

• OPM is <u>NOT</u> a product approval program, hence vibration isolators, roof curbs, and concrete anchors cannot be approved as stand-alone items. They can, however, be approved as part of the supports for a specific component or as part of the bracing for a distribution system.



US Test Facility Requirements

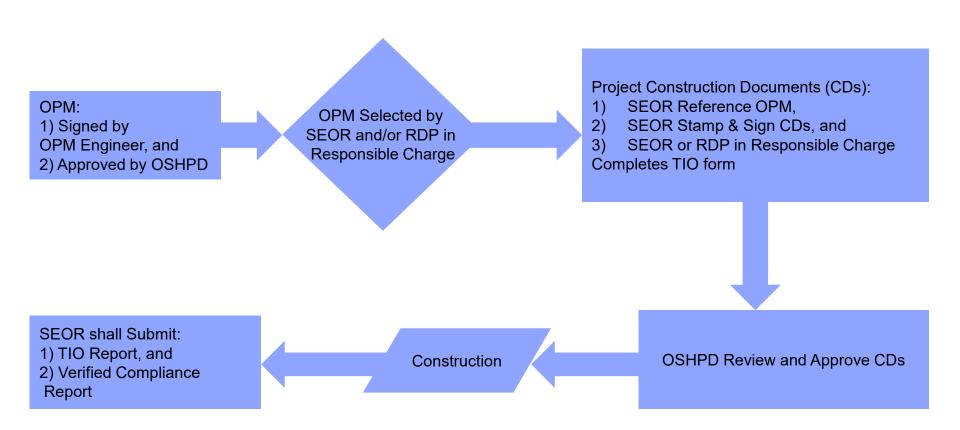
Testing laboratory shall have ISO 17025 accreditation,

or

 Testing shall be under the responsible charge of an independent California Licensed engineer.



Implementation of "Single Component" OPM in OSHPD Projects





Implementation of "Distribution Systems" OPM in OSHPD Projects

