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Mechanical Code

City of San Diego 2013 Mechanical Regulations - Proposed Code Changes

1. UPDATE THE LIST OF CMC APPENDIX CHAPTERS ADOPTED

Note: Section §148.0105 is proposed to be deleted due to relocation to Section 129.0404 discussed in the "Construction Permit Procedures" package.

Update list of appendix chapters adopted.

Text as it would appear in LDC

~~§148.0106-0105~~ Adoption of Appendices to ~~2010~~ California Mechanical Code

- (a) The following Appendix Chapters of the ~~2010~~ 2013 California Mechanical Code not adopted by a State agency as identified in Section 148.0103 and the adoption matrices of the ~~2010~~ 2013 California Mechanical Code are adopted by the City of San Diego:
- (1) Chapter 1, Part II Administration.
 - (2) Appendix A - Uniform Mechanical Code Standard No. 6-2.
- (b) The following Appendix Chapters of the ~~2010~~ 2013 California Mechanical Code adopted by a State agency as identified in

Section 148.0103 and the adoption matrices of the ~~2010~~ 2013 California Mechanical Code are adopted by the City of San Diego:

~~(1) Appendix A – Uniform Mechanical Code Standard No. 6-2.~~

~~(2)~~ (1) Appendix B - Procedures to be Followed to Place Gas Equipment in Operation.

~~(3)~~ (2) Appendix C - Installation and Testing of Oil (Liquid) Fuel-Fired Equipment.

~~(4)~~ (3) Appendix D - Unit Conversion Tables.

Reason: Appendix A was not adopted by any State agency so it will not be adopted. Appendix D will not be adopted since most applications will require a registered design professional to design the venting.

2. EXISTING MECHANICAL SYSTEMS

Add requirements based on Sections 101.3 for additions and 102.3 in Division II of the CMC since the Division is not adopted by the City of San Diego change of occupancy and 102.5 for plumbing systems in relocated buildings.

Text as it would appear in LDC

§148.0108 Mechanical Regulations In Existing Buildings.

- (a) Mechanical systems that are a part of a building or structure undergoing a change in use or occupancy, as defined in the California Building Code, shall comply with the requirements of the prevailing edition of the California Mechanical Code applicable to the new use or occupancy.
- (b) Mechanical systems that are a part of existing buildings or structures that are to be relocated shall not be required to comply with the requirements of the prevailing edition of

the California Mechanical Code applicable to new buildings if the existing mechanical systems comply with Section 121.0302. Alterations to such mechanical systems shall comply with the requirements for new mechanical systems.

Reason: The proposed change aligns the plumbing permit procedures with Ch 1 Division II of the California Mechanical Code that is not adopted by the City of San Diego. Section 121.0302 of the LDC addresses the majority of the regulations in Section 101 and 102 of the CMC. However, existing buildings and relocated buildings are not addressed.

3. CLOTHES DRYER TERMINATION IN COMMON SHAFT

Modify the CMC to include requirements for common shafts used to convey exhaust from multiple domestic clothes dryers.

Text as it appears in 2013 CMC

504.3 Clothes Dryers. Moisture exhaust ducts shall terminate on the outside of the building and shall be equipped with a backdraft damper. Screens shall not be installed at the duct termination. Ducts for exhausting clothes dryers shall not be connected or installed with sheet metal screws or other fasteners that will obstruct the flow. Clothes dryer moisture exhaust ducts shall not be connected to a gas vent connector, gas vent, or chimney, and shall serve clothes dryers. Clothes dryer moisture exhaust ducts under positive pressure shall not extend into or through ducts or plenums.

504.3.1 Domestic Clothes Dryers. Where a compartment or space for a domestic clothes dryer is provided, not less than a 4 inch diameter (102 mm) moisture exhaust duct of approved material shall be installed in accordance with this section and Section 504.0.

Where a closet is designed for the installation of a clothes dryer, an opening of not less than 100 square inches (0.065 m²) for makeup air shall be provided in the door or by other approved means.

504.3.1.1 Domestic Dryer Vents. Domestic clothes dryer moisture exhaust ducts shall be of metal and shall have smooth interior surfaces.

Exception: Listed clothes dryer transition ducts not more than 6 feet (1829 mm) in length shall be permitted to be used in connection with domestic dryer exhausts.

Flexible clothes dryer transition ducts shall not be concealed within construction.

504.3.1.2 Length Limitation. Unless otherwise permitted or required by the dryer manufacturer's instructions and approved by the Authority Having Jurisdiction, domestic dryer moisture exhaust ducts shall not exceed a total combined horizontal and vertical length of 14 feet (4267 mm), including two 90 degree (1.57 rad) elbows. A length of 2 feet (610 mm) shall be deducted for each 90 degree (1.57 rad) elbow in excess of two.

Section 504.3.3 "Common exhaust systems for clothes dryers located in multistory structures". Where a common multistory duct system is designed and installed to convey exhaust from multiple clothes dryers, the construction of the system shall be in accordance with all of the following:

- (1) The shaft in which the duct is installed shall be constructed and fire-resistance rated as required by the California Building Code.
- (2) Dampers shall be prohibited in the exhaust duct. Penetrations of the shaft and ductwork shall be protected in accordance with Section 717.5.3 of the California Building Code.
- (3) Rigid metal ductwork shall be installed within the shaft to convey the exhaust. The ductwork shall be constructed of sheet steel having a minimum thickness of 0.0187 inch (0.4712 mm) (No. 26 gage) and in accordance with SMACNA Duct Construction Standards.
- (4) The ductwork within the shaft shall be designed and installed without offsets.
- (5) The exhaust fan motor design shall be in accordance with Section 503.2 of the California Mechanical Code.
- (6) The exhaust fan motor shall be located outside of the airstream.
- (7) The exhaust fan shall run continuously, and shall be connected to a standby power source.
- (8) Exhaust fan operation shall be monitored in an approved location and shall initiate an audible or visual signal when the fan is not in operation.
- (9) Makeup air shall be provided for the exhaust system.
- (10) A cleanout opening shall be located at the base of the shaft to provide access to the duct to allow for cleaning and inspection. The finished opening shall be not less than 12 inches by 12 inches (305 mm by 305 mm).
- (11) The common multistory duct system shall serve only clothes dryers and shall be independent of other exhaust systems.

504.3.2 Commercial Clothes Dryers. Commercial dryer exhaust ducts shall be installed in accordance with their listings. The installation of commercial clothes dryer exhaust ducts shall comply with the appliance manufacturer's installation instructions.

Text extracted/modified from 2012 IMC

504.8 Common exhaust systems for clothes dryers located in multistory structures. Where a common multistory duct system is designed and installed to convey exhaust from multiple clothes dryers, the construction of the system shall be in accordance with all of the following:

1. The shaft in which the duct is installed shall be constructed and fire-resistance rated as required by the ~~International~~-California Building Code.
2. Dampers shall be prohibited in the exhaust duct. Penetrations of the shaft and ductwork shall be protected in accordance with Section 607.5.5, Exception 2.
3. Rigid metal ductwork shall be installed within the shaft to convey the exhaust. The ductwork shall be constructed of sheet steel having a minimum thickness of 0.0187 inch (0.4712 mm) (No. 26 gage) and in accordance with SMACNA Duct Construction Standards.
4. The ductwork within the shaft shall be designed and installed without offsets.
5. The exhaust fan motor design shall be in accordance with Section 503.2 of the California Mechanical Code.
6. The exhaust fan motor shall be located outside of the airstream.
7. The exhaust fan shall run continuously, and shall be connected to a standby power source.
8. Exhaust fan operation shall be monitored in an approved location and shall initiate an audible or visual signal when the fan is not in operation.
9. Makeup air shall be provided for the exhaust system.
10. A cleanout opening shall be located at the base of the shaft to provide access to the duct to allow for cleaning and inspection. The finished opening shall be not less than 12 inches by 12 inches (305 mm by 305 mm).
- ~~11. Screens shall not be installed at the termination.~~
12. The common multistory duct system shall serve only clothes dryers and shall be independent of other exhaust systems.

Text as it would appear in LDC

148.0104 Modifications to the 2010 California Building Code Adopted by the City of San Diego

The following Sections or Subsections of the 2013 California Mechanical Code are modified by the City of San Diego:

- (a) Chapter 5, Exhaust Systems; Section 504.3

§148.01040105 Additions to the ~~2010~~ 2013 California Mechanical Code Adopted by the City of San Diego

The following Sections or Subsections have been added to the ~~2010~~ 2013 California Mechanical Code regulations by the City of San Diego: ~~None.~~

- (a) Chapter 5, Exhaust Systems; Section 504.3.3.

§148.0501 Local Modifications and Additions to Chapter 5 “Exhaust Systems” of the 2013 California Mechanical Code

- (a) Chapter 4 of the 2013 California Mechanical Code is adopted by reference with additions and modifications pursuant to Sections 148.0104 and 148.0105 of the Land Development Code.

§ 148.0504 Local Modifications and Additions to Section 504.3 “Clothes Dryers” of the California Mechanical Code.

- (a) Chapter 5 of the ~~2007~~ 2013 California Mechanical Code has been adopted without change pursuant to Section 148.0104 of the Land Development Code. Section 504.3.3 “Common exhaust systems for clothes dryers located in multistory structures” is added as follows.

- (b) Where a common multistory duct system is designed and installed to convey exhaust from multiple clothes dryers, the construction of the system shall be in accordance with all of the following:
- (1) The shaft in which the duct is installed shall be constructed and fire-resistance rated as required by the California Building Code.
 - (2) Dampers shall be prohibited in the exhaust duct. Penetrations of the shaft and ductwork shall be protected in accordance with Section 717.5.3 of the California Building Code.
 - (3) Rigid metal ductwork shall be installed within the shaft to convey the exhaust. The ductwork shall be constructed of sheet steel having a minimum thickness of 0.0187 inch (0.4712 mm) (No. 26 gage) and in accordance with SMACNA Duct Construction Standards.
 - (4) The ductwork within the shaft shall be designed and installed without offsets.
 - (5) The exhaust fan motor design shall be in accordance with Section 503.2 of the California Mechanical Code.
 - (6) The exhaust fan motor shall be located outside of the airstream.
 - (7) The exhaust fan shall run continuously, and shall be connected to a standby power source.
 - (8) Exhaust fan operation shall be monitored in an approved location and shall initiate an audible or visual signal when the fan is not in operation.
 - (9) Makeup air shall be provided for the exhaust system.

- (10) A cleanout opening shall be located at the base of the shaft to provide access to the duct to allow for cleaning and inspection. The finished opening shall be not less than 12 inches by 12 inches (305 mm by 305 mm).
- (11) The common multistory duct system shall serve only clothes dryers and shall be independent of other exhaust systems.

Reason: When California Decided to adopt the Uniform Mechanical code as a basis for the 2013 California Mechanical code in lieu of the 2012 International Mechanical Code, regulations for dryer ducts locate in a common shaft typically found in multi-family housing were not adopted. Section 504.8 of the IMC is coordinated with Section 717.5.3 Exception # 5 of the 2013 California Building Code. The amendment addresses provisions for cleaning the common shaft and preventing the transfer of smoke to other stories due to omission of fire dampers and smoke dampers. Item # 11 from the IMC is not adopted since the CMC in Section 504.3 addresses the requirement. CMC and IMC Section 503.2 include the same requirements to limit the clogging of fans. Item # 3 of the IMC is adopted and does not conflict with Section 905 of the CMC and includes specific requirements to ensure that ductwork concealed within the common shaft do not fail prematurely and requires rigid ducting.

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