Issue DS 2019-043: The petitioner Mr. William G. Thames, Jr., of Arbor Properties, Inc. is seeking a Declaratory Statement on whether venting electric clothes dryer into a breezeway satisfies the venting requirement of section 504.1 of the 6th Edition (2017) Florida Building Code, Mechanical.

Petitioner seeks clarification of the following question:

Does venting the electric clothes dryer in question into a breezeway, specifically depicted in exhibit "A", meet the requirement of section 504.1 with regard to exhausting electric clothes dryer exhaust outside of the building?

Background:

Arbor Properties, Inc. (Arbor) is vertically integrated real estate firm specializing in the development, construction and management of apartment properties. Arbor is currently in the design phase of a future project in Bay County that will likely consist of 274 +/- multifamily dwelling units. One specific building type is a three story "breezeway building" which is displayed in exhibit "A". The breezeway building features an open breezeway with 240 square feet of openings on each end for a total of 480 square feet of ventilation (displayed in exhibit "A"). Each unit will be all electric and feature its own laundry room with an electric domestic dryer that Arbor planning to vent into the breezeway of the building. Each breezeway will have four dryer exhaust vents. The proposed design vents the dryer in the "breezeway" of the apartment building, which requires 1'-2' of tubing. Additionally, the proposed design meets all domestic clothes dryer manufacturer exhausting instructions and each vent is independent of all other systems.

6th Edition (2017) Florida Building Code, Mechanical

SECTION 501 GENERAL
501.3 Exhaust discharge. The air removed by every mechanical exhaust system shall be discharged outdoors at a point where it will not cause a public nuisance and not less than the distances specified in Section 501.3.1. The air shall be discharged to a location from which it cannot again be readily drawn in by a ventilating system. Air shall not be exhausted into an attic, crawl space, or be directed onto walk- ways.

Exceptions:
1. Whole-house ventilation-type attic fans shall be permitted to discharge into the attic space of *dwelling units* having private attics.
2. Commercial cooking recirculating systems.
3. Where installed in accordance with the manufacturer's instructions and where mechanical or *natural ventilation* is otherwise provided in accordance with Chapter 4, *listed* and *labeled* domestic duct- less range hoods shall not be required to discharge to the outdoors.

501.3.1Location of exhaust outlets. The termination point of exhaust outlets and ducts discharging to the out- doors shall be located with the following minimum distances:

1. For ducts conveying explosive or flammable vapors, fumes or dusts: 30 feet (9144 mm) from property lines; 10 feet (3048 mm) from operable openings into buildings; 6 feet (1829 mm) from exterior walls and roofs; 30 feet (9144 mm) from combustible walls and operable openings into buildings which are in the direction of the exhaust discharge; 10 feet (3048 mm) above adjoining grade.
2. For other product-conveying outlets: 10 feet (3048 mm) from the property lines; 3 feet (914 mm) from exterior walls and roofs; 10 feet (3048 mm) from operable openings into buildings; 10 feet (3048 mm) above adjoining grade.
3. For all *environmental air* exhaust: 3 feet (914 mm) from property lines; 3 feet (914 mm) from operable openings into buildings for all occupancies other than Group U, and 10 feet (3048 mm) from mechanical air intakes. Such exhaust shall not be considered hazardous or noxious.
4. Exhaust outlets serving structures in flood hazard areas shall be installed at or above the elevation required by Section 1612 of the *Florida Building Code, Building* for utilities and attendant equipment.
5. For specific systems see the following sections:
   5.1. Clothes dryer exhaust, Section 504.4.
   5.2. Kitchen hoods and other kitchen exhaust *equipment*, Sections 506.3.13, 506.4 and 506.5.
   5.3. Dust stock and refuse conveying systems, Section 511.2.
   5.4. Subslab soil exhaust systems, Section 512.4.
   5.5. Smoke control systems, Section 513.10.3.
   5.6. Refrigerant discharge, Section 1105.7.
   5.7. Machinery room discharge, Section 1105.6.1.

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SECTION 504 CLOTHES DRTYER EXHAUST

504.1 Installation. Clothes dryers shall be exhausted in accordance with the manufacturer's instructions. Dryer exhaust systems shall be independent of all other systems and shall convey the moisture and any products of *combustion* to the outside of the building.

Exception: This section shall not apply to *listed* and *labeled* condensing (ductless) clothes dryers.

2.1. **Exhaust penetrations.** Where a clothes dryer exhaust duct penetrates a wall or ceiling membrane, the annular space shall be sealed with noncombustible material, *approved* fire caulking or a noncombustible dryer exhaust duct wall receptacle. Ducts that exhaust clothes dryers shall not penetrate or be located within any fireblocking, draftstopping or any wall, floor/ceiling or other assembly required by the *Florida Build- ing Code, Building* to be fire-resistance rated, unless such duct is constructed of galvanized steel or aluminum of the thickness specified in Section 603.4 and the fire-resistance rating is maintained in accordance with the *Florida Building Code, Building*. Fire dampers, combination fire/smoke dampers and any similar devices that will obstruct the exhaust flow shall be prohibited in clothes dryer exhaust ducts.

2.2. **Cleanout.** Each vertical riser shall be provided with a means for cleanout.

2.3. **Exhaust installation.** Dryer exhaust ducts for clothes dryers 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 shall not be connected or installed with sheet metal screws or other fasteners that will obstruct the exhaust flow. Clothes dryer exhaust ducts shall not be connected to a vent connector, vent or *chimney*. Clothes dryer exhaust ducts shall not extend into or through ducts or plenums.

2.4. **Dryer exhaust duct power ventilators.** Domestic dryer exhaust duct power ventilators shall be listed and labeled to UL 705 for use in dryer exhaust duct systems. The dryer exhaust duct power ventilator shall be installed in accordance with the manufacturer's instructions.

2.5. **Makeup air.** Installations exhausting more than 200 cfm (0.09 m^3/s) shall be provided with *makeup air*. Where a closet is designed for the installation of a clothes dryer, an opening having an area of not less than 100 square inches (0.0645 m^2) shall be provided in the closet enclosure or *makeup air* shall be provided by other *approved* means.

2.6. **Protection required.** Protective shield plates shall be placed where nails or screws from finish or other work are likely to penetrate the clothes dryer exhaust duct. Shield plates shall be placed on the finished face of all framing members where there is less than $1^1/_4$ inches (32 mm) between the duct and the finished face of the framing member. Protective shield plates shall be constructed of steel, have a thickness of 0.062 inch (1.6 mm) and extend not less than 2 inches (51 mm) above sole plates and below top plates.

2.7. **Domestic clothes dryer ducts.** Exhaust ducts for domestic clothes dryers shall conform to the requirements of Sections 504.8.1 through 504.8.6.

504.8.1 Material and size. Exhaust ducts shall have a smooth interior finish and shall be constructed of metal a minimum 0.016 inch (0.4 mm) thick. The exhaust duct size shall be 4 inches (102 mm) nominal in diameter.

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201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the *Florida Building Code, Building*; *Florida Fire Prevention Code*; *Florida Building Code, Fuel Gas* or the *Florida Building Code, Plumbing* such terms shall have meanings ascribed to them as in those codes.

6th Edition (2017) Florida Building Code, Energy Conservation

Chapter 2 – Definitions

OUTDOOR. The environment exterior to the building structure.

OUTDOOR (OUTSIDE) AIR. Air that is outside the building envelope or is taken from outside the building that has not been previously circulated through the building.

OUTSIDE. The environment exterior to the conditioned space of the building and may include attics, garages, crawl- spaces, etc., but not return air plenums.

6th Edition (2017) Florida Building Code, Building

CHAPTER 1 SCOPE AND ADMINISTRATION

SECTION 102 APPLICABILITY

[A] 102.1 General. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

Chapter 2 – Definitions

[A] BUILDING. Any structure occupied or intended for supporting or sheltering any *occupancy*.

Staff Analysis

Question:

Does venting the electric clothes dryer in question into a breezeway, specifically depicted in exhibit "A", meet the requirement of section 504.1 with regard to exhausting electric clothes dryer exhaust outside of the building?

Answer

Option #1/Petitioner: We believe the answer to the question is "Yes." Exhausting the dryer vent into the open breezeway depicted in exhibit "A" does meet the requirements of section 504.1. In fact, Arbor has constructed over 700 units across Leon County, the City of Tallahassee, Bay County, the City of Lynn Haven, and the City of Panama City that feature dryer vents in the breezeway that satisfy section 504.1.

Option #2/Staff: The answer to Petitioner's question is yes. Exhausting the dryer vent into the open breezeway of the project in question does meet the venting requirement of section 504.1 of the 6th Edition (2017) Florida Building Code, Mechanical.