

## INDUSTRY NEWS

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### EPA Rules on Revising Charge Sizes

**WASHINGTON, D.C.**—The U.S. Environmental Protection Agency (EPA) has issued a final rule revising charge sizes of hydrocarbon refrigerants in new residential refrigerators and freezers. The rule, officially published in The Federal Register on Aug. 8, allows charge sizes of up to 150 grams (5.3 ounces) for three flammable hydrocarbon refrigerants—*isobutane (R-600a)*, *propane (R-290)*, and *refrigerant blend R-441A*—used in new household refrigerators, freezers, and combination refrigerators and freezers under the Significant New Alternatives Policy (SNAP) program to reflect an updated standard from Underwriters Laboratories. The EPA's guidance applies to new equipment that is specifically designed for gasses with a higher level of flammability. The rule became effective Sept. 7. ■

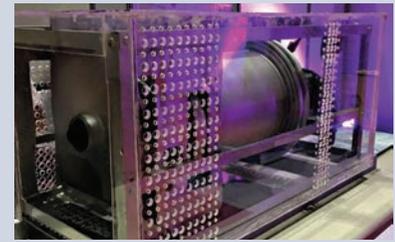
### Rules Codified for Tall Timber Buildings

**SALEM**—Oregon has become the first state in the U.S. to provide a prescriptive path for the construction of

tall buildings that use wood as one of their primary building materials. The Statewide Alternate Method, SAM No. 18-01, was issued in early August by the State Building Codes Division. The code is based on provisions developed by the International Code Council's tall wood building ad hoc committee. The provisions call for the use of concrete, steel or masonry for the vertical elements of the seismic force-resisting system. ■

### China Leads Growth In Demand for Boilers

**BRACKNELL, UK**—Driven by an increase in government environmental policies and increasing gasification in the Asia-Pacific region, the domestic boiler market grew significantly in 2017, according to new data from BSRIA. China led the growth, said BSRIA, and “is now by far the largest global market.” The Chinese government's “coal to gas” energy-source policies are key drivers. South Korea remains the second-largest domestic boiler market. The UK is third, and the largest market outside Asia. According to BSRIA, “The North American market remains a low consumer of domestic boilers.” ■



A working prototype of the “AirDisc Air Conditioning Technology.”

### AC System Uses Air as Refrigerant

**MANILA**—Maria Yzabell Angel V. Palma, a 19-year-old student, was recognized by the International Federation of Inventors' Association (IFIA) for her invention of an air-conditioning system that uses air as the refrigerant.

The “AirDisc Air Conditioning Technology” system uses a disc-shaped centrifugal compressor and rotating concentric air tanks that take in a high volume of air molecules from the surrounding room for compression. The heated air is then separated and discharged, while the resultant compressed air molecules with less heat are allowed to expand—resulting in a continuously lowered room temperature. ■

### Data Center in Singapore to Use Artificial Intelligence

**SINGAPORE**—Google is building its third data center in Singapore to meet Southeast Asia's growing demand for online services. It will use artificial intelligence (AI) to reduce energy use.

The machine-learning algorithm is trained for the specific needs and environment of the site, and adjusts parameters based on data gathered during runtime. In addition, the facility will use recycled water and plans to divert 100% of the data center's waste away from landfills. The new site is near



A rendering of Google's newest data center in Singapore.

Google's other two data centers in the Jurong West district. It will cost an estimated \$300 million. ■



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