

COMMERCIAL CLOTHES WASHERS



Overview: CEE launched the Commercial, Family-Sized Washer Initiative in 1998 as an offshoot of its Residential Clothes Washer Initiative. The initiative encourages the purchase and use of energy- and water-efficient clothes washers. The commercial family-sized washers are nearly identical to those a homeowner would buy, with some minor engineering differences (e.g. a coin box).

About This Market: About 14 percent of total domestic laundry is done in commercial, family-sized washers. There are three basic components to this market: laundromats, private multi-family housing and large institutions (i.e. military barracks, universities and housing authorities). There are approximately 2-3 million of these machines operating in the United States and they are replaced at a rate of about 10 percent per year. According to *Appliance Magazine*, the total number of washers replaced each year is approximately 265,000. Around 42,000 of those replaced clothes washers are sold to laundromats. It should be noted that, although laundromats represent less than 20 percent of the market, washers in these locations are in use much more frequently than in other locations. This has been factored into the water and energy saving estimates below.

How CEE's Washer Initiative Works: Manufacturers submit data about their clothes washers to CEE based on U.S. Department of Energy (DOE) residential washer test procedures. CEE then qualifies their products at the appropriate efficiency tier level. CEE's revised high-efficiency specifications became effective Jan. 1, 2007 (see next page).

Using CEE's list of qualified products, interested utilities and other market players (i.e. multifamily building owners, large institutional facility managers and route operators) will be able to differentiate between standard- and high-efficiency products.

In this way, CEE helps overcome one of the key barriers to the purchase and use of commercial family-sized washers – the availability of energy and water-use data. CEE also encourages manufacturers to build high-efficiency commercial washers by increasing awareness of these appliances and creating demand in the commercial sector for high-efficiency products.

In addition, CEE is partnering with the DOE/EPA ENERGY STAR[®] program in promoting high-efficiency commercial washers. On June 1, 2001 ENERGY STAR added commercial washers (with capacities of 3.5 cubic feet or less) to its other labeled products.

Expected Water Savings: CEE assumes a baseline water consumption of 37,000 gallons/year (water factor of 12.63). Washers meeting the current CEE specification yield water savings of 40-64 percent. This translates into estimated annual savings of up to 24,000 gallons per year in a multifamily application (assumes approximately three cycles per day) and up to 50,000 gallons per machine in a laundromat (assumes roughly six cycles per day).

Expected Energy Savings: Based on information from CEE calculations (assuming three turns per day), each machine using gas water heating and gas drying in the multifamily sector would save approximately 20-30 therms of gas each year. Each machine using electric water heating and drying that sector would save about 700-1,000 kilowatt hours per year.

Approximately 70 percent of commercial washers use gas. In addition, the new machines extract more moisture from the clothes, reducing the time and energy used for drying. Those savings have also been computed into the total. In the laundromat sector, each machine using gas water heating and drying would save approximately 42-64 therms of gas annually (assuming six turns per day). Each machine using electric water heating and drying in that sector would save about 1,500-2,100 kilowatt hours per year. As above, savings resulting from decreased drying time and energy have also been computed into the total.

Consumer Benefits: The benefits are similar to those associated with the high-efficiency residential clothes washer. There are energy and water savings, which do not directly benefit the consumer but do impact the environment in a positive way (less pollution and waste water). Tests have shown that high-efficiency washers get clothes cleaner, rinse more thoroughly and treat clothes more gently.

Contact: Additional information about CEE’s Commercial Clothes Washers Initiative is available at www.ceel.org or by contacting Eileen Eaton at 617-589-3949, ext. 203, or eeaton@ceel.org.

Commercial, Family-Sized Clothes Washer specifications Effective January 1, 2007

Level	MEF	WF
ENERGY STAR®	1.80	7.5
CEE Tier 1	1.80	7.5
CEE Tier 2	2.00	6.0
CEE Tier 3	2.20	4.5

MEF=Modified Energy Factor, a combination of Energy Factor and Remaining Moisture Content. MEF measures energy consumption of the total laundry cycle (washing and drying). It indicates how many cubic feet of laundry can be washed and dried with one kWh of electricity; the higher the number, the greater the efficiency.

WF=Water Factor (number of gallons needed for each cubic foot of laundry). A lower number indicates lower consumption and more efficient use of water.