

Residential Awnings & Exterior Roller Shades &

Their Impact on Cooling Energy

### A NATION-WIDE 50-CITY STUDY

© 2012 Professional Awning Manufacturers Association





## COOLING ENERGY SAVINGS WITH AWNINGS & EXTERIOR ROLLER SHADES

WEST / NO. WEST Anchorage AK

Denver CO Honolulu Hi

Medford OR

Portland OR

Salt Lake City UT

Seattle WA

Boise ID

Sacramento CA San Francisco CA EAST / NO. EAST Washington DC

Boston MA

Portland ME

Charlotte NC

Buffalo NY

New York, NY Philadelphia PA

Pittsburgh PA

Norfolk VA

CENTRAL / NO. CENTRAL

Chicago IL

Indianapolis IN Detroit MI

Minneapolis MN

Kansas City MO St. Louis MO

Omaha NE

Cincinnatti OH

SUNBELT

Jacksonville FL Miami FL

Tampa FL

Atlanta GA

New Orleans LA

Charleston SC

MemphisTN El Paso TX

Ft. Worth TX

Houston TX

San Antonio TX

Mobile AL

Little Rock AR

Oklahoma City OK

Phoeniz AZ

Tucson AZ Burbank CA

Fresno CA

Palm Springs CA

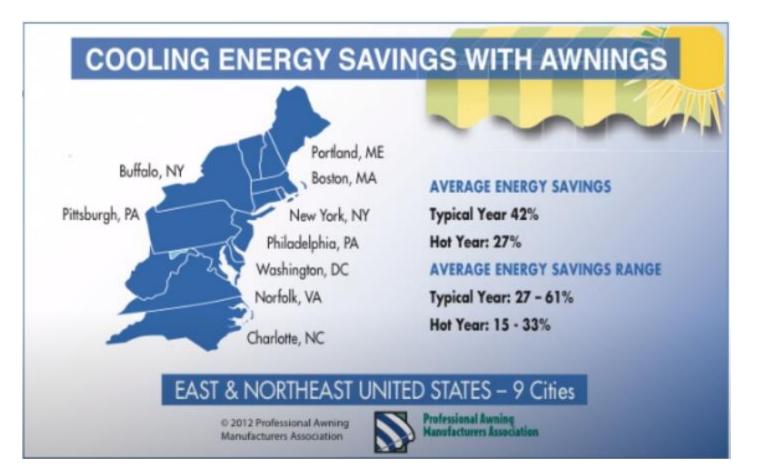
San Diego CA

Albuquerque NM

Las Vegas NV

© 2012 Professional Awning Manufacturers Association

Birmingham AL



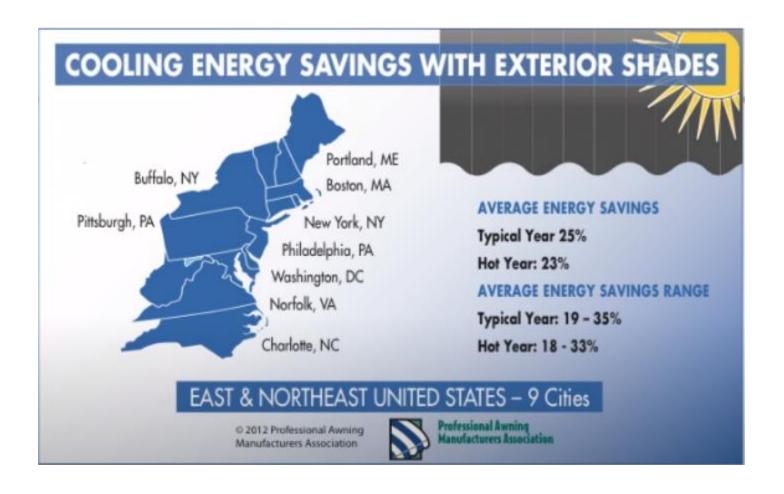


MAINE • DC • MASSACHUSETTS
NEW YORK • PENNSYLVANIA
NORTH CAROLINA • VIRGINIA

#### **COOLING ENERGY SAVINGS WITH AWNINGS**

EAST / NORTH EAST	Cooling Energy Savings		Energy Savings Amount	
	Avg Year	Hot Year	Avg. Year	/ Hot Year
Washington, DC	39%	33%	\$100	\$126
Boston, MA	51%	42%	\$ 65	\$ 85
Portland, ME	61%	52%	\$ 35	\$ 59
Charlotte, NC	27%	23%	\$ 83	\$106
Buffalo, NY	57%	43%	\$61	5 99
Philodelphia, PA	37%	30%	\$.70	5 92
Pittsburgh, PA	55%	41%	\$.44	\$112
Norfolk, VA	31%	29%	\$13	\$ 92

© 2012 Professional Awning Manufacturers Association





MAINE • DC • MASSACHUSETTS
NEW YORK • PENNSYLVANIA
NORTH CAROLINA • VIRGINIA

#### **COOLING ENERGY SAVINGS WITH EXTERNAL ROLLER SHADES**

EAST / NORTH EAST	Cooling Energy Savings		Energy Savings Amount (\$)	
	Avg Year	Hot Year	Avg. Year	/ Hot Year
Washington, DC	25%	22%	\$ 64	\$ 86
Boston, MA	28%	23%	\$ 35	\$ 46
Portland, ME	21%	33%	\$ 12	\$ 37
Charlotte, NC	19%	18%	\$ 59	\$81
Buffalo, NY	35%	28%	\$ 37	\$ 64
Philodelphia, PA	25%	21%	\$ 47	\$ 64
Pittsburgh, PA	22%	28%	\$ 17	\$ 51
Norfolk, VA	23%	19%	\$ 52	\$61

© 2012 Professional Awning Manufacturers Association





# COOLING ENERGY SAVINGS WITH AWNINGS & EXTERIOR ROLLER SHADES

This study was commissioned by the Professional Awning Manufacturers Association and conducted by White Box Technologies. The study calculates the impact of awnings and roller shades in 50 cities across the United States and incorporates weather patterns for 10 years for each of the 50 cities to establish a "typical" year. In addition, the study includes data for the hottest year among the ten.

The study considers three (3) variations of window glass, four (4) variations of window orientation and both summer and year-round use of awnings and roller shades. While an earlier 12-city study focused on newer home construction, this study considers an older home which is 10% smaller (1700 sq. ft.) and has less insulation.

© 2012 Professional Awning Manufacturers Association