

Residential Awnings & Exterior Roller Shades &

Their Impact on Cooling Energy

### A NATION-WIDE 50-CITY STUDY





# COOLING ENERGY SAVINGS WITH AWNINGS & EXTERIOR ROLLER SHADES

WEST / NO. WEST

Anchorage AK Denver CO

Honolulu Hi

Medford OR

Portland OR

or darid On

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 Chicago IL Indianapolis IN

Detroit MI

Minneapolis MN

CENTRAL / NO. CENTRAL

Kansas City MO

St. Louis MO

Omaha NE

Cincinnatti OH

SUNBELT

Jacksonville FL Miami FL

Tampa FL

Atlanta GA

New Orleans LA

Charleston SC

Memphis TN El Paso TX

El Paso IX

Ft. Worth TX

Houston TX

San Antonio TX Birmingham AL

MOELI

Mobile AL

Little Rock AR

Oklahoma City OK

Phoeniz AZ

Tucson AZ

Burbank CA

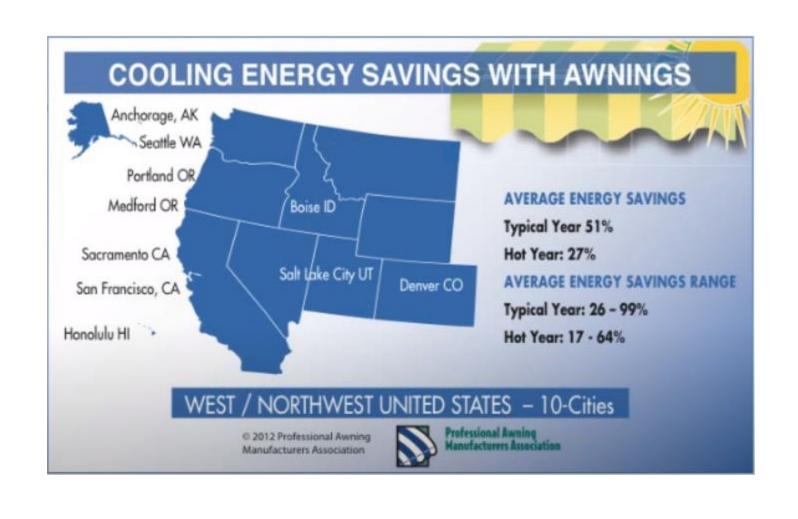
Fresno CA

Palm Springs CA

San Diego CA

Albuquerque NM

Las Vegas NV

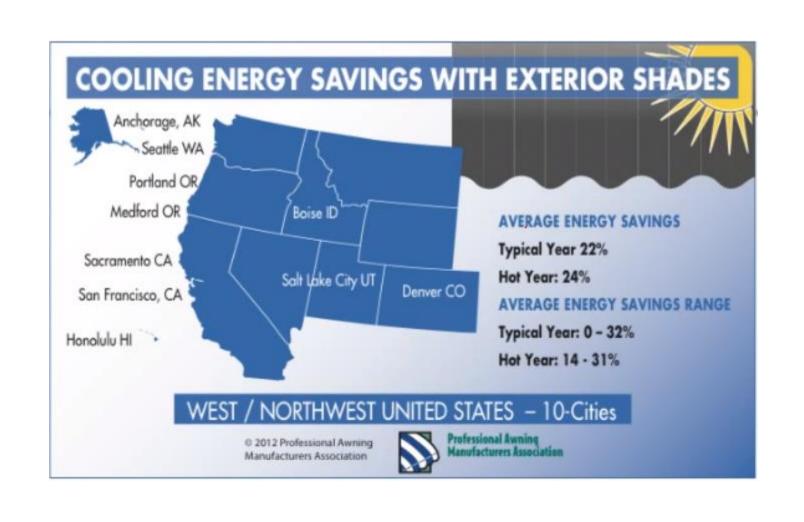




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#### **COOLING ENERGY SAVINGS WITH AWNINGS**

WEST / NORTH WEST	Cooling Energy Savings		Energy Savings Amount (\$)	
	Avg Year	Hot Year	Avg. Year	/ Hot Year
Anchorage AK	100%	81%		
Denver, CO	43%	41%	\$ 60	\$ 64
Honolulu, HI	26%	24%	\$ 94	\$607
Medford, OR	39%	29%	\$ 52	\$ 69
Portland, OR	49%	38%	\$ 35	\$ 43
Salt Lake City, UT	34%	29%	5.44	\$ 59
Seattle, WA	71%	50%	\$13	\$ 92
Boise, ID	42%	34%	\$40	\$ 55
Sacramento, CA	36%	31%	\$112	\$131
San Francisco, CA	72%	48%	\$11	\$ 20





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

WEST / NORTH WEST	Cooling Energy Savings (%)		Energy Savings Amount (\$)	
	Avg Year	Hot Year	Avg. Year	/ Hot Year
Anchorage AK	0%	154	\$ 0	5.1
Denver, CO	32%	31%	\$ 45	5.49
Honolulu, HI	22%	20%	\$463	\$504
Medford, OR	25%	24%	\$ 33	\$ 57
Portland, OR	21%	14%	\$15	\$ 16
Salt Lake City, UT	19%	24%	\$102	5 48
Seattle, WA	29%	29%		\$ 12
Boise, ID	27%	29%	\$ 26	\$ 47
Sacramento, CA	27%	29%	\$ 86	\$122
San Francisco, CA	16%	28%	\$ 2	\$11





# 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.