

APPENDIX G

Estimated Costs for retrofitting typical* home built in 1970 to current Title 24 requirements

Description	Title 24	Installed at build-out	Cost to upgrade
Insulation Walls	R-13 min (standard is R-19)	R-11	unknown; wallboard or siding would need to be removed
Insulation Attic	R-19 min (standard is R-38)	R-13	\$500
Air conditioning	13 Seer low energy	not rated	\$4,000
Tight ducts, insulated	R-4.2 insulation, no leaks	Metal or perf. Flex	\$1,000
Air infiltration	Weather stripping, caulk, sealants (all pipe penetrations, vents, etc.)	Door W/S	\$500
Windows	Vinyl, low-E, dual-glazed	Alum., single glazed	\$6,000
Screens	tight-mesh, nylon or wire	wire, open mesh	\$400
Lighting	low energy bulbs, some required on-off sensors, fluorescent fixtures in some rooms	incandescent, manual controls	\$300
Heating	no pilots, new efficiency requirements	cont. burning pilots, no e-rating	\$2,500
Hot water heater	no pilots, new efficiency requirements	cont. burning pilots, no e-rating	\$400
	R-12 insulation	no insulation	
Water	insulated piping, low-flow fixtures,	galv, piping, no rated fixtures	\$1,200
Air controls	auto set-back t-stat	no rating	\$100
Air handler	platforms not used as plenum, must have ducts	platforms used as plenum	\$300
		Total	\$14,700

* 1,800 sq. ft. framed, stucco exterior, comp. roof

Estimate Provided by Jim Marks, General Manager, The Cirrus Company and Heritage Management Group. July 2011.