

Item	Description	Increased Cost Estimate from EPA*	Difficulty Level			Comments
			Low	Medium	High	
1. Envelope	Completed Thermal Bypass Inspection Checklist	\$300				
	Completed Quality Framing Checklist	\$50				Recommend phasing this requirement in over a period of 12 months.
2. Cooling and Heating System	Completed HVAC Quality Installation Contractor Checklist	\$400				Recommend 12-24 month phase in, governed by ability to put an effective training infrastructure in place.
	Completed HVAC Quality Installation Rater Checklist	\$50				Recommend 12-24 month phase in, governed by ability to put an effective training infrastructure in place.
3. Water Efficiency	Average flow-rate for all shower-heads shall be 2.0 gallons per minute	\$30				
	Hot water distribution system shall use demand pumping, manifold or core layout	\$366				The building industry as a whole has relatively little experience with these types of hot water distribution systems. As a result, a significant potential exists for actually increasing energy usage. In addition, the water distribution system, which is currently a well understood element of the building design, is potentially a very vulnerable area to large scale litigation due to the potential result of defects in the system, i.e. water leakage. Recommend phasing in requirement over 12-24 months, governed by ability to put an effective training infrastructure in place.
4. Lighting and Appliances	All installed refrigerators, dishwashers, and clothes washers shall be ENERGY STAR qualified	30**				
	Advance lighting package (ALP), or ENERGY STAR bulbs in 80% of sockets, shall be installed	\$94				
	All installed bathroom exhaust and ceiling fans shall be ENERGY STAR qualified	200***				
5. IAQ and Durability	Completed Indoor Air Quality Checklist	\$500				Recommend studying the impact of using continuously operating fans (likely the preferred approach by builders) to accomplish mechanical ventilation. This approach relies upon the natural penetrations in the building envelope to provide make up air. Due to the ever increasing tightness of the building envelope, there is the potential for negatively pressuring the conditioned space, potentially creating an unhealthy indoor air quality environment.
	Completed Water-Managed Construction Checklist	\$200				
	EPA's increased cost estimate*	\$1,990				

* Pricing for all items based on the Averaged cost from the EPA's national data sample protocol, pricing should be calculated for each region as needs are different in each climate zone.

**Refrigerator \$30; Dishwasher \$0; no cost for clothes washer listed.

***Based on 2 bathroom exhaust fans