

# Touchstone Energy Home Program Standards Checklist

Your Touchstone Energy Cooperative

All products must be installed as per manufacturer specifications

## SITE, FOUNDATION, BASEMENT



1	Site Selection	Well-drained
2	Site Excavation	4" of clean drainage rock or sand under floor
*	3 Foundation	Capillary break on top of footing and under basement wall; waterproof covering on foundation exterior; rock backfill on exterior for better drainage
*	4 Ground Cover	8-mil plastic vapor barrier on crawl space floor or under concrete basement floor, taped seams with 6 inches overlap
*	5 Basement Wall Insulation	R-15 or higher - (interior or exterior)
*	6 Crawl Space Wall Insulation	R-15 or higher - (interior or exterior)
*	7 Concrete Slab Foundation Insulation	1" - 2" under slab; R-10 exterior; 4' external (frost free foundation)
8	Basement/Crawl Space Floor Insulation	1" - 2" foam sheeting under basement/crawl space floor

## BUILDING ENVELOPE

*	9 Band Joist Insulation	R-10 minimum (foam) and sealed
*	10 Exterior Corner and Wall Framing	Energy efficient exterior corners and exterior wall connections
*	11 Window and Door Headers	Must be insulated
*	12 Roof Framing	Raised heel (energy efficiency) trusses - 14" minimum heel height
*	13 Exterior and Knee Wall Insulation	R-24 minimum
*	14 Attic Insulation	R-49 minimum
*	15 Roof or Cathedral Ceiling Insulation	R-30 minimum or full cavity fill
*	16 Attic Ventilation	Vented w/1 ft <sup>2</sup> per 300 ft <sup>2</sup> ceiling area; air chutes from soffit
*	17 Air Infiltration Control	All seams and penetrations into unconditioned spaces sealed
*	18 Interior Vapor Retarder - Walls	"Forgiveable" vapor retarder on inside of all exterior walls
*	19 Interior Vapor Retarder - Ceilings	"Forgiveable" vapor retarder on inside of all exterior ceilings
*	20 Exterior Wall Receptacles	Sealed and insulated
*	21 House Wrap/Rain Screen	Drainable house wrap system

## WINDOWS AND DOORS

*	22 Window Glass U-Factor	U-0.30 maximum
*	23 Skylight Glass U-Factor	U-0.60 maximum
*	24 Doors	Insulated with adjustable threshold and magnetic or foam weather stripping; U-.30 maximum for glass
*	25 Window and Door Flashing	Correctly install flashing to prevent water infiltration

## HVAC, WATER HEATING AND ELECTRICAL

*	26 Heating and Cooling	All-electric recommended. Acceptable: electric dual fuel, gas fireplace. Geothermal heat pump - minimum COP 3.3 (heating), EER 14.1 (cooling); Air Source heat pump - minimum HSPF 8.5 (heating), SEER 15.0 (cooling)
*	27 Ductwork	Recommend placing all ducts in conditioned areas only. If supply or return ducts outside of thermal envelope, insulate to R-12. Ducts in floor trusses outside of thermal envelope: R-10. Building cavities cannot be used as supply ducts. Seal all duct joints with mastic.
*	28 Water Pipe Insulation	R-2 pipe wrap for pipes with temps >105 F or < 55 F
*	29 Exhaust Systems	Ventilation to meet ASHRE calculated CFM standards required; HRV or ERV
*	30 Water Heating	Electric, .92+ Energy Factor or heat pump water heater; no on-demand water heaters
*	31 Lighting	At least 80% energy efficient LED Energy Star fixtures/lamps; recessed lights IC-rated and air-tight
*	32 Wiring	Must meet Electrical Code requirements, including G.F.C.I. in required locations
33	Appliances	All-electric suggested; if gas range - hood must be vented to outside

\* = Required; other items highly recommended

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