

COMPARISON

ENERGY STAR Version 3.0 and 2015 National Green Building Standard™

ENERGY STAR Certified Homes focuses on reducing a home’s energy use through a tight building envelope, an efficient HVAC system, better windows, and efficient appliances. NGBS Green Certification, based on the **ICC/ASHRAE-700 National Green Building Standard™**, takes the energy performance required by ENERGY STAR and adds requirements to the home’s design and construction to reduce water use, improve indoor air quality, increase resource efficiency, and enhance durability. Further, NGBS Green ensures the home buyer is informed on the operation and maintenance of the home so that the home continues to perform well into the future.

General Information		 Home Innovation Research Labs
Certification Body	Environmental Protection Agency	Home Innovation Research Labs
Green Building Categories	<ul style="list-style-type: none"> • Energy Efficiency (HVAC & Appliances) 	<ul style="list-style-type: none"> • Lot design, preparation, and development • Resource Efficiency • Energy Efficiency (ENERGY STAR requirements + more flexibility) • Water Efficiency • Indoor Environmental Quality • Building Operation and Maintenance
Third-Party Verifiers	HERS Rater	NGBS Green Verifier
Fees	<ul style="list-style-type: none"> • Rater pays QA and registry fees to RESNET • Rater inspection fee 	<ul style="list-style-type: none"> • As low as \$100/home • Volume Discounts Available • Verifier fees for inspection and verification
Energy Efficiency Requirements Above 2015 IECC	<ul style="list-style-type: none"> • ENERGY STAR Ver. 3.0 aims for 10% above code 	2015 NGBS: <ul style="list-style-type: none"> • NGBS Green Bronze – 5-10% • NGBS Green Silver – 20% • NGBS Green Gold – 30% • NGBS Green Emerald – 35%
Additional information	<ul style="list-style-type: none"> • Prescriptive Path not available - higher inspection cost due to more extensive performance testing and energy modeling • HVAC contractor will often charge more for ENERGY STAR testing & documentation • Some quality assurance before certification is not completed until after home is certified and sold 	<ul style="list-style-type: none"> • Home must meet the base level for each of the rating categories • NGBS practices are comprehensive and address issues above energy efficiency that home buyers care about, such as indoor air quality, health, and wellness, and durability • All quality assurance completed <u>before</u> certification is issued to ensure home is compliant

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ENERGY STAR Certified HVAC contractor to install the system	Required	Not required, but earns 1 optional point toward certification (705.5.1)
Designer report (Manual J, D, & S for all unit types)	Required	Required
HVAC Commissioning Checklist (all units)	Required	Not required, but earns 3 points toward certification (705.5.3(1))
Fresh air ventilation for HVAC system that meets ASHRAE 62.1&2, some type of air flow regulator (air cycler)	Required	Only required if maximum air infiltration rate is less than 5.0 ACH50
Venting of the kitchen range to the outside, meeting the ASHRAE 62.1 & 2 Standard of 100+ CFM	Required	Not required, but earns points toward certification
Bath fan ventilation meeting ASHRAE 62.1 & 2 Standard for 50+ CFM	Required	Required
Framing inspection	Required	Required
Insulation and air sealing inspection	Required	Required
HVAC Duct work testing; rates of 6% leakage and 4% leakage to outside (all units)	Required	Not required, but earns points toward certification (703.4.4)
Blower door testing, i.e., envelope leakage testing	Required	Required
Ventilation & Exhaust Testing	Required	Required
Static pressure testing	Required	Not Required
Room air balance testing	Required	Not Required
Pre-construction Design/Plan Review	Required	Required
Energy model using accepted software	Required; building must meet a certain level of energy savings as determined by the model and performance test to be certified to ES	Not required if NGBS Prescriptive Path followed