

# Level Up with ENERGY STAR NextGen Rater Training & Program Updates 2025 RESNET Conference Speakers: Dylan Tindall and Zak Shadid January 2025



# Today's Speakers





#### Zak Shadid

Partner Services, ENERGY STAR Residential Branch, EPA

#### **Dylan Tindal**

Technical Training Lead, The BER





# Agenda

- 1. Program Update
- 2. Rater Training



# Program Update



# Why ENERGY STAR NextGen?

To reduce emissions in residential construction, think beyond energy efficiency to include:

- Highly efficient construction
- Advanced technologies
- Connected equipment



# NextGen Energy Efficiency Specifications

# Achievable, market-ready requirements





**Energy use** Highly energyefficient construction

**Connected heat pump** Multi-stage ENERGY STAR certified



**Connected heat pump water heater** ENERGY STAR certified



Electric cooking to improve indoor air quality



Electric vehicle charging capability



# **ENERGY STAR NextGen Early Participation**



- ✓ ENERGY STAR NextGencertified homes: 63
- ✓ Rating companies: 12
- ✓ Builders: 20
- ✓ Utilities: **19**
- ✓ Average ERI score: 23



# Rater Training

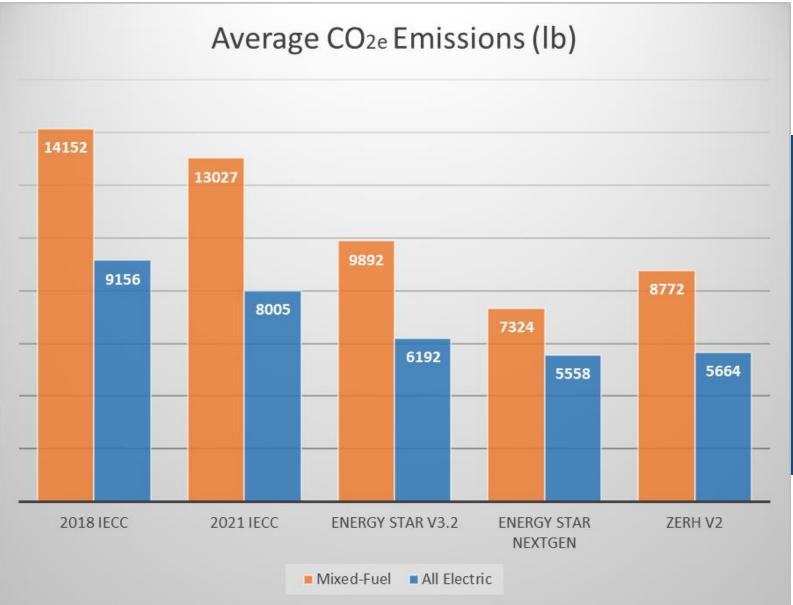


### Background

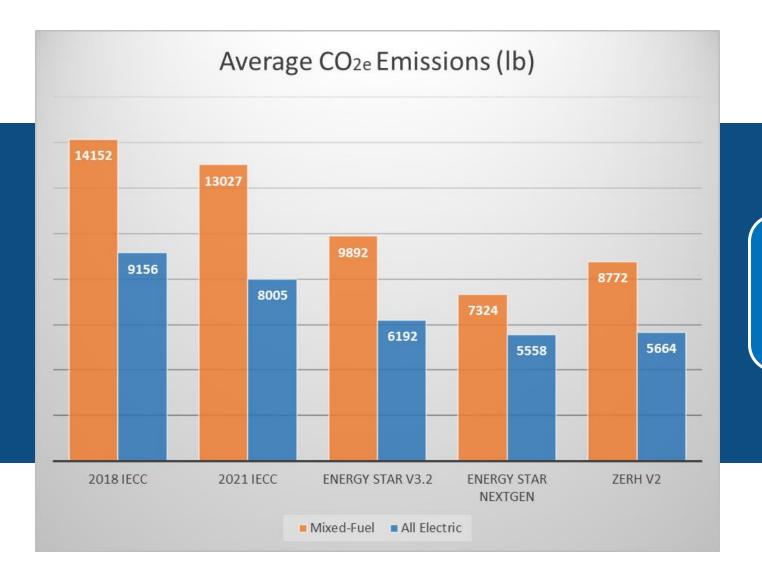
- Does NOT replace core ENERGY STAR Certification
  - Completed in ADDITION to core program
  - Completely optional





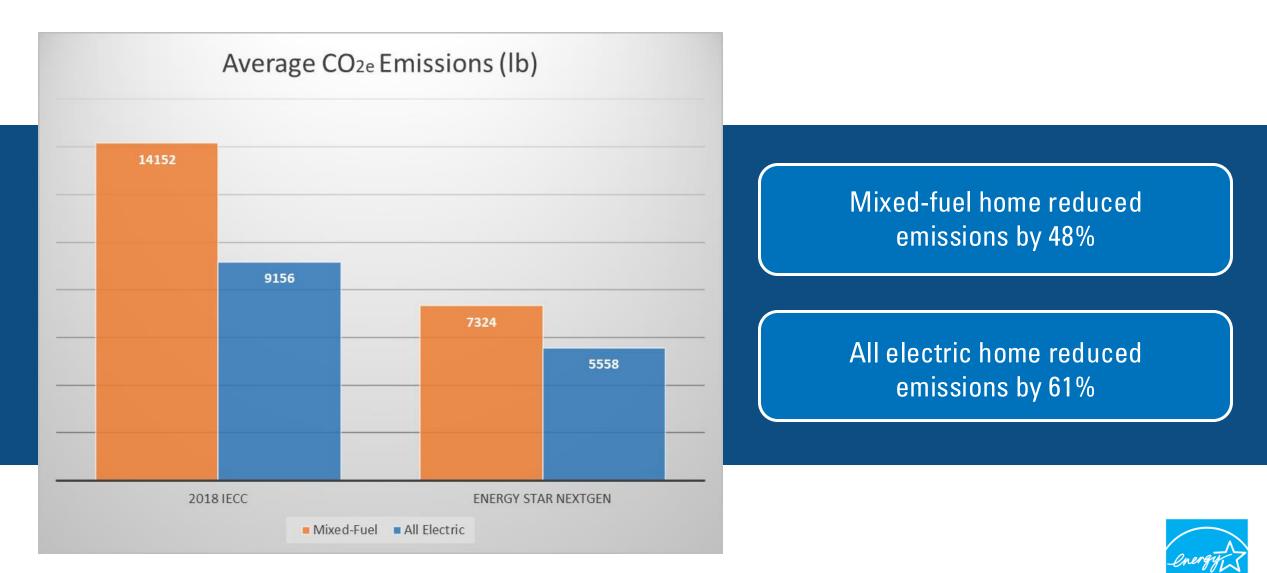




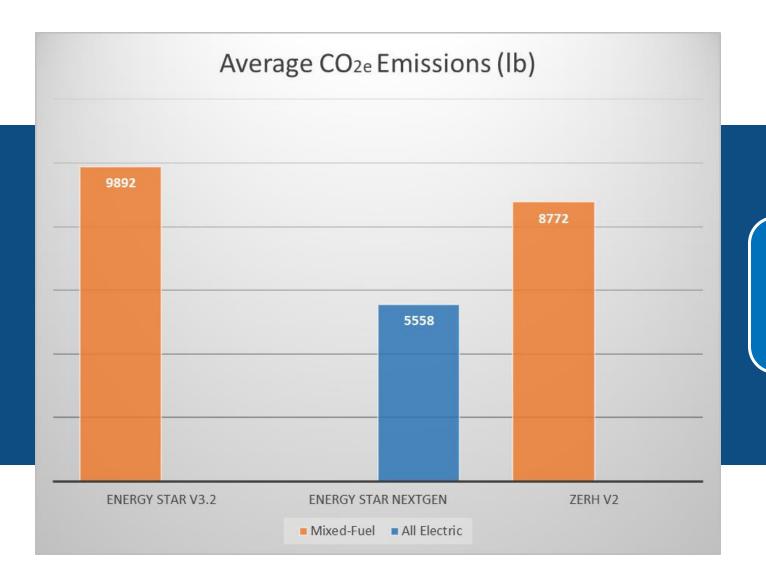


Replacing gas equipment with heat pumps reduces emissions by at least 35%



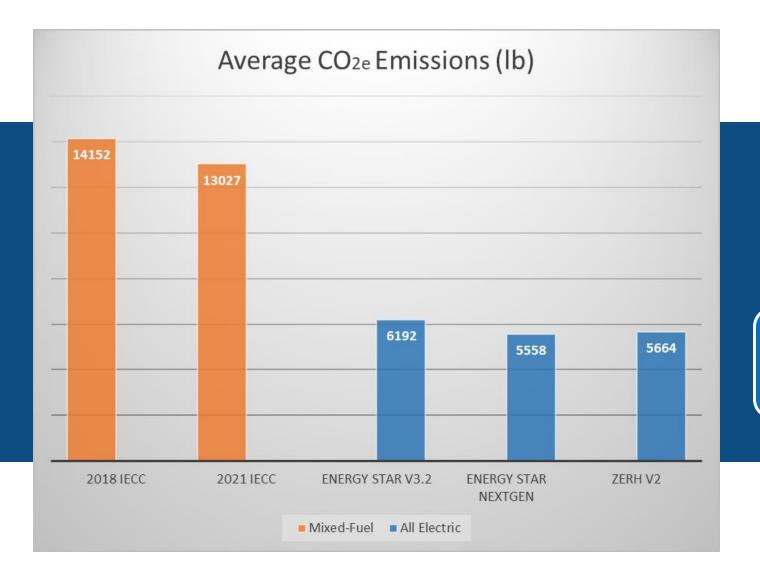


ENERG



Going NextGen reduces emissions by more than just electrifying either an ENERGY STAR v3.2 home or a ZERH v2 home





# Efficiency + Electrification = Greatest Reductions

ENERGY STAR NextGen sees most significant emissions reductions



# Overview of Program Requirements

Home/Building Address:	City		_ State:	Permit Dat	te:			
1. ENERGY STAR Certification Base	line			Must Correct	Rater Verified 1	<b>N/A</b> <sup>2</sup>		
Single Family	.1 Home or building certified under one of the following ENERGY STAR New Construction programs (check box):       Single Family New Homes (SFNH)       Multifamily New Construction (MFNC)         Image: SFNH National Version 3.2       Image: MFNC National Version 1.2         California Projects Only:       Image: SFNH California Version 3.4       Image: MFNC California Version 1.4							
2. Dwelling Unit Space Heating								
2.1 ENERGY STAR certified heat pump(	) installed and sized in accorda	nce with the HVAC Design R	eport			-		
2.1.1 For each air-source heat pump are Grade I per ANSI / RESNE		blower fan watt draw, and re	frigerant charge					
2.1.2 In CZ 5-8, installed air-source	neat pumps are ENERGY STAR	certified for Cold Climate						
2.2 Each heat pump is controlled by a wi 'connected' criteria	i thermostat or ENERGY STAR	certified smart thermostat, or	meets EPA's					
2.3 Each air-source heat pump has two-s	peed or variable-speed blower f	an & two-speed or variable-s	peed compressor					
3. Dwelling Unit Water Heating								
3.1 ENERGY STAR certified heat pump	vater heater that is 208/240 volt	s is installed <sup>4</sup>						
3.2 Each heat pump water heater has mi Bedrooms <sup>6</sup> : 0- Minimum Tank Capacity: 3	1 2 3	s follows: 4+ 72						
3.3 Each heat pump water heater located	within occupiable space has a I	manufacturer-rated sound lev	/el ≤ 55 dBA <sup>7,8</sup>					
3.4 Each heat pump water heater meets communications interface (EcoPort)	EPA's 'connected' criteria or has	s an ANSI / CTA-2045 compl	iant modular					
4. Cooking								
4.1 Cooktops and ovens are electric 9. In	luction range elements / burners	s are recommended, but not	required					
5. Electric Vehicle Charging Infrastr For all other dwellings and dwelling units			eway or garage, co	omply with	Item 5.1			
5.1 EV-Ready: One parking space is pro	ided per dwelling unit that inclue	des all of the items below: 10		-	-			
5.1.1 A powered 208/240 receptacle	is installed in garage or within 3	3 feet of driveway or dedicate	d parking space 11			-		
5.1.2 The electric service panel inclu circuit as "Electric vehicle char		er), and panel directory ident	ifies the branch			-		
5.2 EV Chargers and EV-Capable parkin	g spaces are installed, including	all of the items below:		-	-			
5.2.1 <u>EV Charger</u> : The following mir EPA's 'connected' criteria: <sup>12, 1</sup> Parking Spaces: 1-10 spac EV Chargers: 1	1	spaces 31-40 spaces	lled that meet 41+ spaces 5			-		
5.2.2 <u>EV-Capable</u> : Conduit is install terminates within 3 feet of at le	d that runs continuously from th ast 20% of the development's p	ne electrical panel to a junctio arking spaces <sup>143, 14, 15</sup>	n box that			-		
Rater Name:	Ra	ater Inspection Date:	Rater I	nitials:				

**N**R

• Certify under:



ES Multifamily New Construction National Version 1.2



**N**R

• Certify under:

ES Single Family New Homes California Version 3.4 ES Multifamily New Construction California Version 1.4



 $\star$ 

CALIFORNIA

1. ENERGY STAR Certi	Must Correct	Rater Verified <sup>1</sup>	<b>N/A</b> <sup>2</sup>		
1.1 Home or building certif	Ũ	TAR New Construction programs (check box):			
	Single Family New Homes (SFNH) SFNH National Version 3.2	Multifamily New Construction (MFNC)  MFNC National Version 1.2			-
California Projects Only:	□ SFNH California Version 3.4	□ MFNC California Version 1.4			

This requirement must be met even if these more rigorous specifications are not yet required in the state for base ENERGY STAR program certification



1. ENERGY STAR Certi	Must Correct	Rater Verified <sup>1</sup>	<b>N/A</b> <sup>2</sup>		
1.1 Home or building certi	fied under one of the following ENERGY STA	R New Construction programs (check box):			
	Single Family New Homes (SFNH)	Multifamily New Construction (MFNC)			-
California Projects Only:	□ SFNH California Version 3.4	□ MFNC California Version 1.4			

Manufactured homes are not currently available for NextGen at this time



2. Dwelling Unit Space Heating		
2.1 ENERGY STAR certified heat pump(s) installed and sized in accordance with the HVAC Design Report		-
2.1.1 For each air-source heat pumps, blower fan volumetric airflow, blower fan watt draw, and refrigerant charge are Grade I per ANSI / RESNET / ACCA Std. 310 <sup>3</sup>		
2.1.2 In CZ 5-8, installed air-source heat pumps are ENERGY STAR certified for Cold Climate		
2.2 Each heat pump is controlled by a wifi thermostat or ENERGY STAR certified smart thermostat, or meets EPA's 'connected' criteria		
2.3 Each air-source heat pump has two-speed or variable-speed blower fan & two-speed or variable-speed compressor		

MULTIFAMILY NOTE: ONLY REQUIRED FOR DWELLING UNITS, NOT COMMON SPACES



2.1 ENERGY STAR certified heat pump(s) installed and sized in accordance with the HVAC Design Report

2.1.1 For each air-source heat pumps, blower fan volumetric airflow, blower fan watt draw, and refrigerant charge are Grade I per ANSI / RESNET / ACCA Std. 310 <sup>3</sup>

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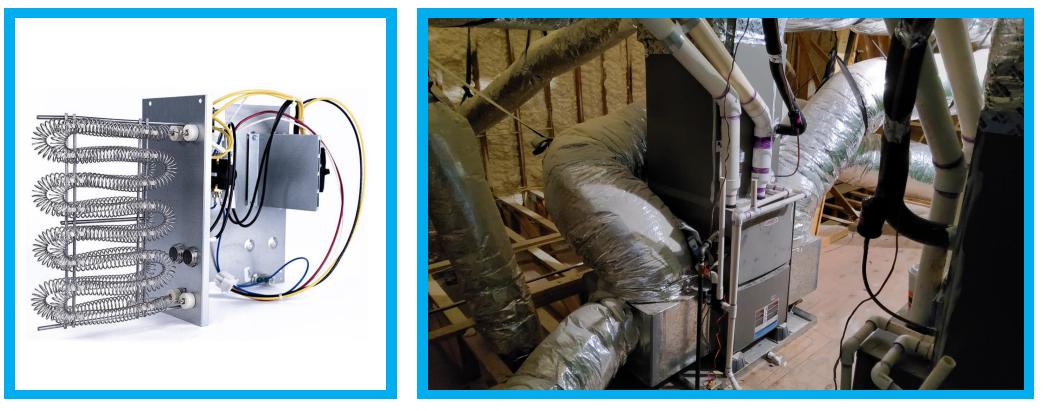


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**ENERGY STAI** 

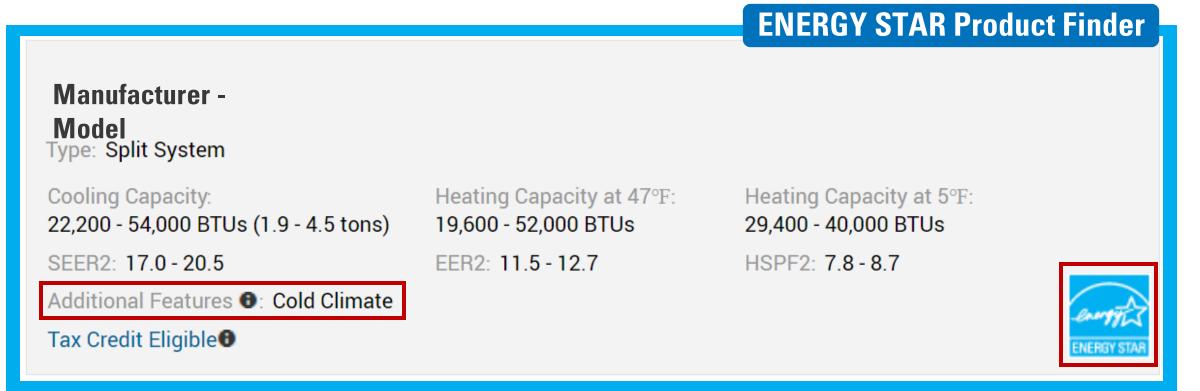
#### A gas furnace is still permitted for backup heating in lieu of an electric-resistance heat strip





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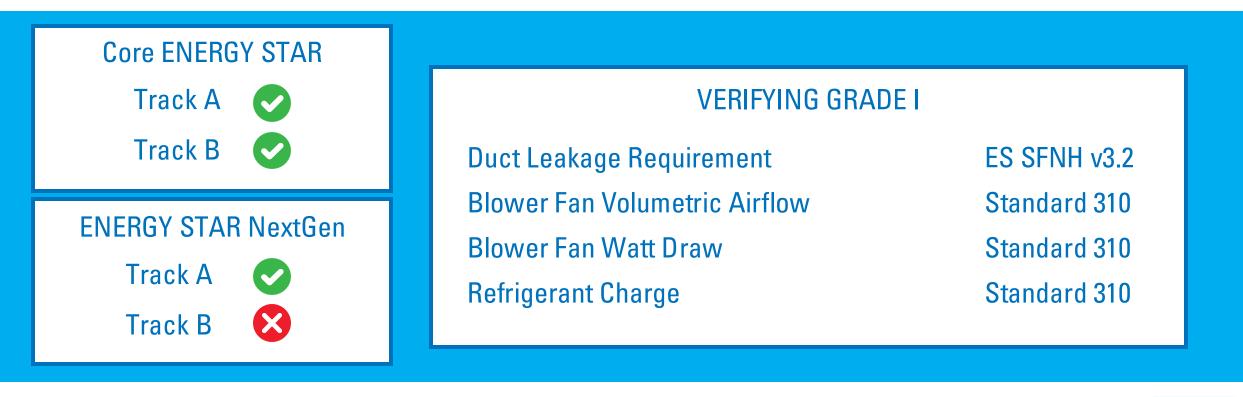
**IS IT ENERGY STAR CERTIFIED? HOW CAN I TELL?** 





2.1 ENERGY STAR certified heat pump(s) installed and sized in accordance with the HVAC Design Report

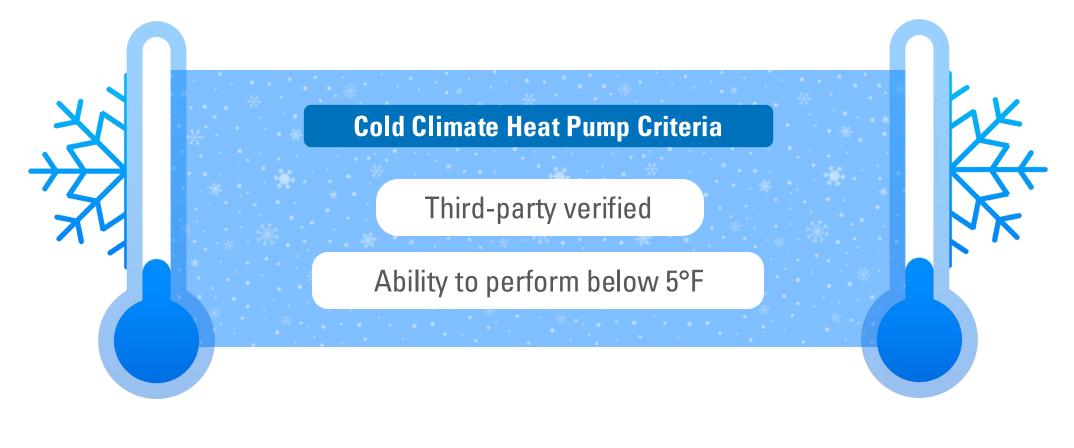
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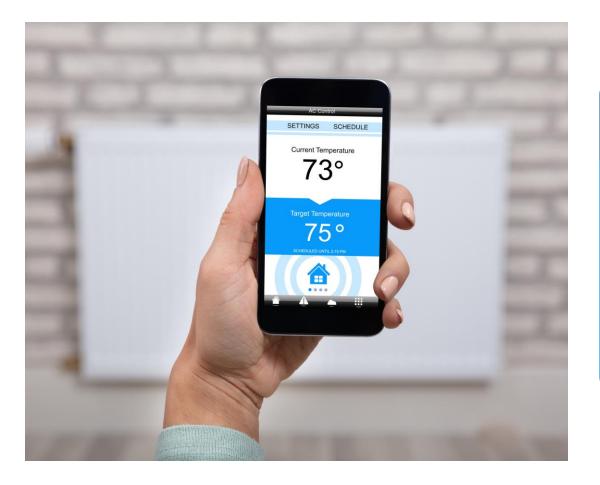
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2.1.2 In CZ 5-8, installed air-source heat pumps are ENERGY STAR certified for Cold Climate

		ENERGY STAR Produ	
Manufacturer - Model Type: Split System			
Cooling Capacity: 22,200 - 54,000 BTUs (1.9 - 4.5 tons)	Heating Capacity at 47°F: 19,600 - 52,000 BTUs	Heating Capacity at 5°F: 29,400 - 40,000 BTUs	
SEER2: 17.0 - 20.5	EER2: 11.5 - 12.7	HSPF2: 7.8 - 8.7	
Additional Features 1 : Cold Climate			and the
Tax Credit Eligible			ENERGY STAR



2.2 Each heat pump is controlled by a Wi-Fi thermostat or ENERGY STAR certified smart thermostat, or meets EPA's 'connected' criteria



# **EPA's CONNECTED CRITERIA** Identify Products That Provide:

- Energy Reporting
- Remote Consumer Access
- Grid Services Through Connection to Other Systems









# National Average CO<sub>2</sub>e Emissions Impact

	1	- 39	6 400	404	406	406	404	401	400	360	299	267	255	252	253	254	255	264	306	357	384	387	384	387	392
	2	- 38	6 389	393	393	393	390	389	382	331	275	250	237	232	232	233	235	242	275	329	370	380	375	376	380
	3	- 35	8 360	363	364	362	359	355	323	264	226	209	202	201	203	203	206	211	240	290	347	362	354	352	352
	4	<b>-</b> 34	4 345	5 346	348	348	347	327	273	224	200	189	187	187	189	190	194	198	221	266	324	352	346	341	342
L	5	<b>-</b> 37	1 371	. 371	374	374	367	323	267	234	216	210	211	212	215	218	223	229	247	281	331	370	370	369	371
onth	6	- 39	2 390	392	394	395	383	327	272	246	231	227	229	233	237	241	246	249	264	291	335	378	385	388	392
lo	7	-42	6 426	6 430	431	433	423	365	304	275	261	258	261	266	269	274	280	283	299	325	367	404	412	415	422
Σ	8	-42	6 427	430	433	435	431	390	327	287	265	258	260	265	268	272	277	279	297	333	379	408	411	419	423
	9	-40	4 405	6 408	410	412	412	392	331	278	255	244	244	247	251	255	259	266	291	340	384	395	390	396	399
	10	<b>-</b> 37	7 379	381	383	384	381	376	335	275	242	228	226	227	231	232	235	247	288	343	373	373	364	367	372
	11	- 38	6 388	391	393	393	389	387	370	314	262	244	238	239	240	240	244	260	311	362	381	376	372	373	380
	12	- 39	2 393	397	400	401	399	395	391	352	294	270	261	259	260	260	262	276	324	371	387	383	379	381	388
		C	1	2	і З	4	ו 5	т 6	7	і 8	ו 9	10	י 11	י 12	13	14	15	16	17	18	י 19	1 20	21	י 22	ı 23
Hour																									



2.2 Each heat pump is controlled by a Wi-Fi thermostat or ENERGY STAR certified smart thermostat, or meets EPA's 'connected' criteria



# Easiest Method: Wi-Fi Thermostats

# RECOMMENDED

ENERGY STAR smart thermostats for:

• Two-stage systems & any variable speed system that has a compatible ENERGY STAR smart thermostat



2.3 Each air-source heat pump has two-speed or variable-speed blower fan & two-speed or variable-speed compressor

#### This is verified by the Standard 310 HVAC design report

4.10 If AC / HP, blower fan motor & speed type: <sup>34</sup>	ECM	Variable	N/A
4.11 If AC / HP, compressor speed type: <sup>35</sup>	Vari	able	N/A

### WHY?

- Quieter
- More Consistent Temperatures
- Greater Comfort



# WHAT ABOUT GEOTHERMAL SYSTEMS?

#### 2. Dwelling Unit Space Heating

2.1 ENERGY STAR certified heat pump(s) installed and sized in accordance with the HVAC Design Report.

- 2.1.1 For each air-source heat pumps, blower fan volumetric airflow, blower fan watt draw, and refrigerant charge are Grade I per ANSI / RESNET / ACCA Std. 310. <sup>3</sup>
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# WHAT ABOUT GEOTHERMAL SYSTEMS?



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2.1.2 In CZ 5.9, installed air source heat numps are ENERCY STAR sortified for Cold Climate

2.2 Each heat pump is controlled by a wifi thermostat or ENERGY STAR certified smart thermostat, or meets EPA's 'connected' criteria.

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2.3 Each air course heat pump has two speed or variable speed blower fan & two speed er variable speed compressor.



# 3. Dwelling Unit Water Heating

3.1 ENERGY STAR certified heat pump water heater that is 208/240 volts is installed <sup>4</sup>



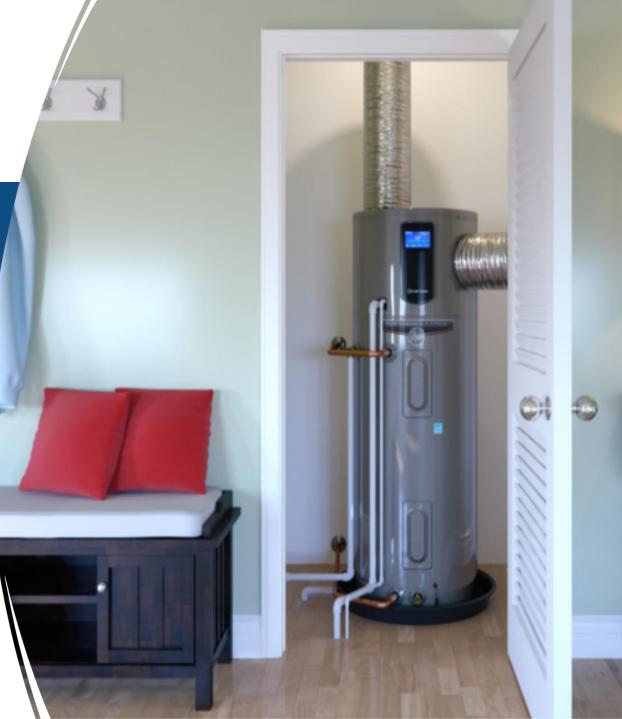
### WHY?

- 4x More Efficient
- Use 70% Less Energy
- Saves Money!

## How Can I Verify This?

## **Check ES Product Finder**

Heat pump water heaters must be verified with the ENERGY STAR Product Finder, not just with product literature.

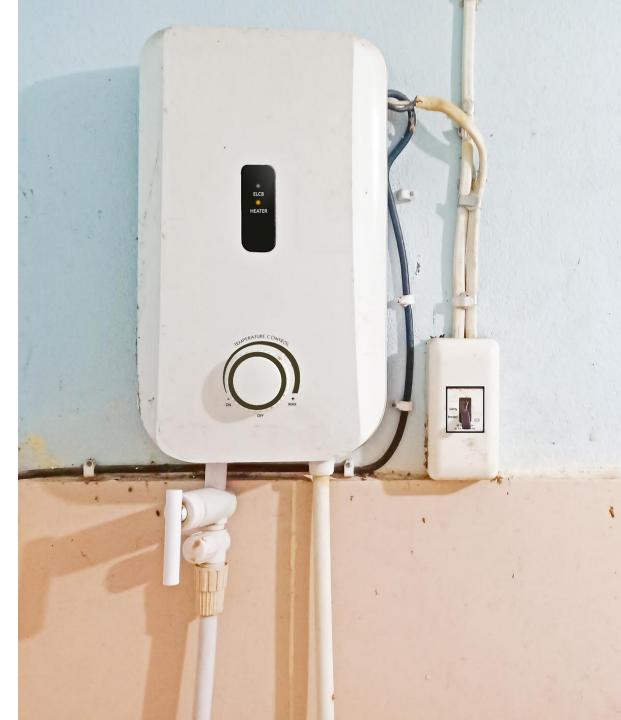


3.1 ENERGY STAR certified heat pump water heater that is 208/240 volts is installed <sup>4</sup>

### FOOTNOTE 4

A single supplemental electric spot water heating system that serves one appliance or bathroom is allowed. The minimum rated storage volume for the dwelling unit is not impacted.





3.2 Each heat pump water heater has minimum rated storage volume<sup>5</sup> as follows:

Bedrooms <sup>6</sup>	0-1	2	3	4+
Minimum Tank Capacity	36	45	59	72

#### Why Tank Size? Where Did the Numbers Come From?

1. A minimum tank size ensures majority of water heating occurs from heat pump, rather than the inefficient backup electric elements in the storage tank.

2. These minimum tank sizes are derived from the first Hour Rating, rounded down to nearest commonly manufactured tank size.

3.3 Each heat pump water heater located within occupiable space has a manufacturer-rated sound level  $\leq$  55 dBA  $^{7\,8}$ 

### What is Occupiable Space?

### **FOOTNOTE 7**

Per ASHRAE 62.2-2010, the term "occupiable space" is defined as any enclosed space inside the pressure boundary and intended for human activities, including, but not limited to, all habitable spaces, toilets, closets, halls, storage and utility areas, and laundry areas.



## Why is This Needed?

Heat Pump Water Heaters may make more noise when operating than some gas or conventional electric water heaters

3.3 Each heat pump water heater located within occupiable space has a manufacturer-rated sound level  $\leq$  55 dBA <sup>7 8</sup>

	Minimum			
	Cool Climat Efficiency	e	Sound	Demand Response-
	(CCE)*	Minimum Features	Levels**	Enabled?
Tier 1.0	2.0	<ul><li>ENERGY STAR compliance</li><li>Freeze protection</li></ul>	dBA < 65	Optional
Tier 2.0	2.3	<ul> <li>Tier 1 plus:</li> <li>Minimal use of resistance heating elements (see Section 2.5.1)</li> <li>Compressor shut-down/notification</li> <li>10 year warranty</li> <li>Condensate management</li> </ul>	dBA < 60	Optional
Tier 3.0	2.6	<ul> <li>Tier 2 plus:</li> <li>Simultaneous intake and exhaust ducting capabilities</li> <li>Air filter management</li> <li>Override and default mode behavior as per Section 2.6.1</li> </ul>	dBA < 55	Required
Tier 4.0	3.0	<ul> <li>Tier 3 plus:</li> <li>Physical design or default controls that limit resistance element heating to less than upper 50% of tank</li> </ul>	dBA < 50	Required
Tier 5.0	3.5	<ul><li>Tier 4 plus:</li><li>No resistance element usage in default</li></ul>	dBA < 50	Required

### How To Verify? FOOTNOTE 8 - NEEA LIST

 Manufacturer-Rated Sound Level ≤ 55 dBA



 Heat pump listed on <u>NEEA</u> <u>Advanced Water Heater</u> <u>Specification Qualified</u> <u>Products List</u> as Tier 3 or greater

3.4 Each heat pump water heater meets EPA's 'connected' criteria or has an ANSI/CTA-2045 compliant modular communications interface (EcoPort)

AMERICAN STANDAR Hybrid/Electric Heat Pump - Ele Storage Volume (gallons): 45 Connected Capable										
	LICK FOR PRODUCT DET									
	Brand	Model <sup>a</sup>	Volume (gal)	Rec'd Max Household Size	CCE <sup>b</sup> Cool Climate Efficiency	UEF Uniform Energy Factor	EcoPort <sup>c</sup>	Plug-In <sup>d</sup>	Qualified Date	
	Tier 4 continu	ied								
	heem	PROPH65 T2 RH375-15	65	3	3.2	4.05	Yes	No	4/23/20	
	Rheem	PROPH65 T2 RH375-30	65	3	3.2	4.05	Yes	No	4/23/20	
	Rheem	PROPH65 T2 RH375-S0 PROPH80 T2 RH375-15	65 80	3	3.2	4.05	Yes Yes	No No	4/23/20	
	Rheem	PROPH80 T2 RH375-15 PROPH80 T2 RH375-30	80	4+	3.2	4.07	Yes	No	4/23/20	
	Phoom		90	4.	2.2	4.07		No	4/22/20	

### 4. Electric Cooking

4.1 Cooktops and ovens are electric<sup>9</sup>. Induction range elements/burners are recommended, but not required.





This requirement does not apply to sleeping units without kitchens but DOES APPLY to kitchens in common spaces. This requirement does not apply to cooking appliances located outside the building thermal envelope (e.g., outdoor kitchens and grills).

### **4. Electric Cooking** Health Impacts

### WHY IS THIS A REQUIREMENT?





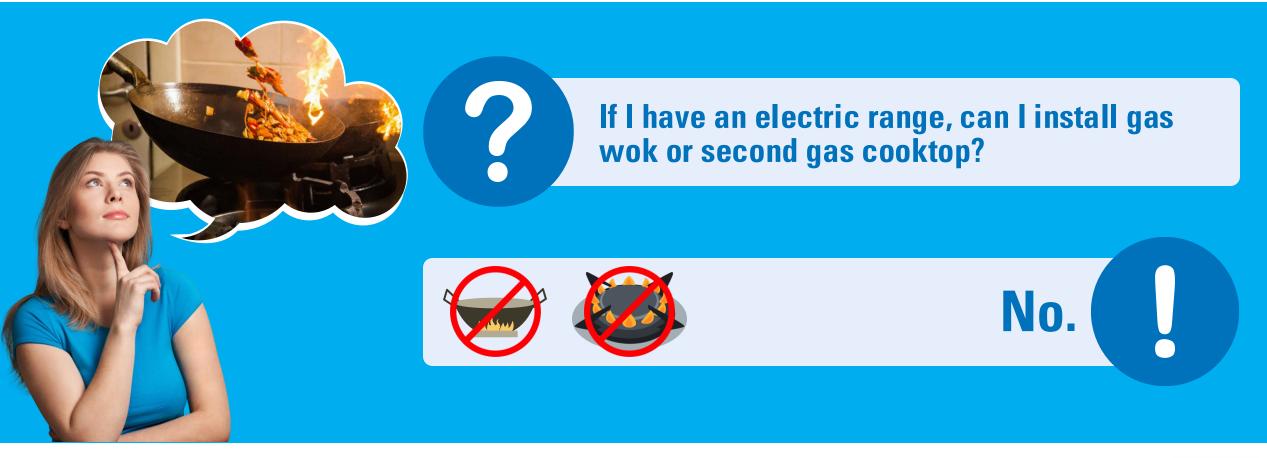
#### Most visible fuel used in homes

Many health impacts are from cooking fuels



### 4. Electric Cooking

4.1 Cooktops and ovens are electric<sup>9</sup>. Induction range elements/burners are recommended, but not required





### 5.1 - EV READY

APPLIES TO: One and Two-Family Dwellings with a private driveway or garage (single family homes, duplexes, & townhomes)



5.2 - EV CHARGERS & PARKING APPLIES TO: All Other Dwellings & Dwelling Units (multifamily)



(Can Also Comply with 5.1)



### 5.1 - EV READY

### **Examples of projects that need to follow this approach**





### 5.1 - EV READY

One parking space is provided per dwelling unit that includes all of the items below: <sup>10</sup>

5.1.1 A powered 208/240 receptacle is installed in garage or within 3 feet of driveway or dedicated parking space <sup>11</sup>

5.1.2 The electric service panel includes a 40amp breaker (or greater), and panel directory identifies the branch circuit as "Electric vehicle charging"





### 5.1 - EV READY

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### **FOOTNOTE 10**

Alternatively, when there are fewer parking spaces than dwelling units, meet Item 5.1 for 100% of units that have parking spaces.



5.1.1 A powered 208/240 receptacle is installed in garage or within 3 feet of driveway or dedicated parking space <sup>11</sup>

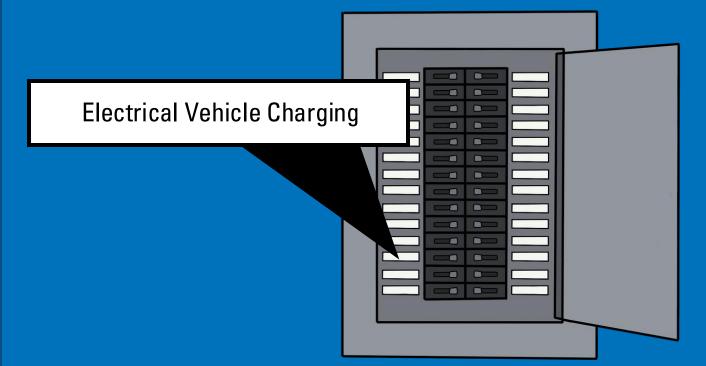




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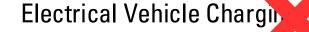
5.1.2 The electric service panel includes a 40-amp breaker (or greater), and panel directory identifies the branch circuit as "Electric vehicle charging"





### **FOOTNOTE 11**

If the addition of the 40-amp Electric Vehicle Charging branch circuit increases the electrical service to the next nominal size (to 400-amp service), connecting the circuit to the electrical panel is not required. The Rater shall retain a copy of the electrical sizing calculations or statement from the electrical designer for their records but need not evaluate the documentation to certify the home. 5.1.2 The Vectric service panel includes a 40-ar  $\rho$  breaker (or greater), and panel directory identifies the branch circuit as "Electric vehicle charging"





## 5.2 - EV CHARGERS & EV-CAPABLE SPACES

EV Chargers and EV-Capable parking spaces are installed, including all of the items below:

### 5.2.1 EV Charger:

The following minimum number of ENERGY STAR certified EV Chargers installed that meet EPA's 'connected' criteria: <sup>12</sup> <sup>13</sup>

Parking Spaces	1-10	11-20	21-30	31-40	41+
EV Chargers	1	2	3	4	5

### 5.2.2 EV-Capable:

Conduit is installed that runs continuously from the electrical panel to a junction box that terminates within 3 feet of at least 20% of the development's parking spaces <sup>13</sup> <sup>14</sup> <sup>15</sup>





## 5.2 - EV CHARGERS & EV-CAPABLE SPACES

### 5.2.1 EV Charger:

The following minimum number of ENERGY STAR certified EV Chargers installed that meet EPA's 'connected' criteria: <sup>12</sup> <sup>13</sup>

Parking Spaces	1-10	11-20	21-30	31-40	41+
EV Chargers	1	2	3	4	5

# What if the Total # of Spaces Exceeds 50?

The minimum EV Charger count remains 5

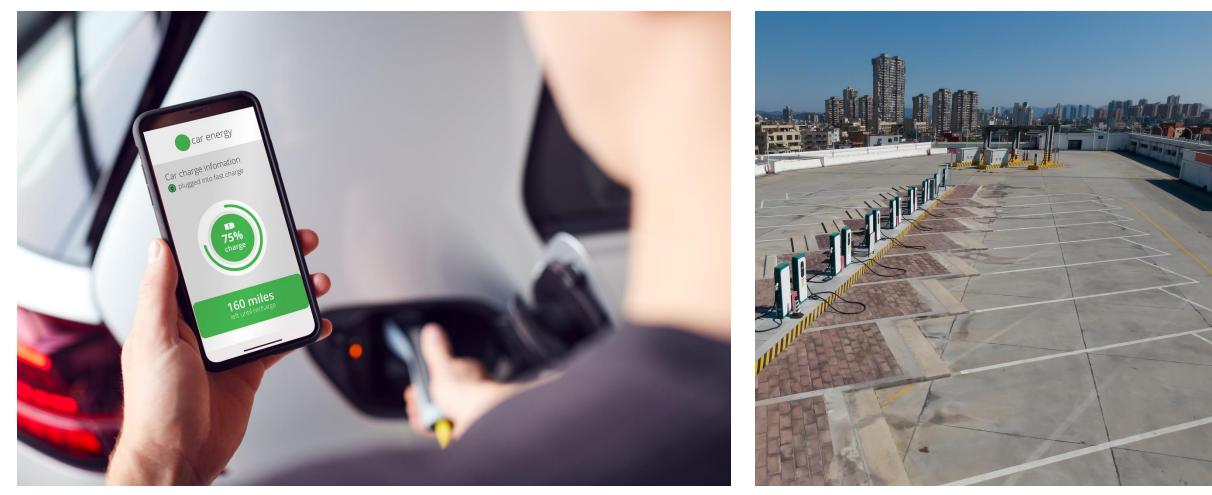
#### **EXAMPLES**

### Parking Lot With:

- 45 Spaces = 5 EV Chargers
- 55 Spaces = 5 EV Chargers
- 70 Spaces = 5 EV Chargers

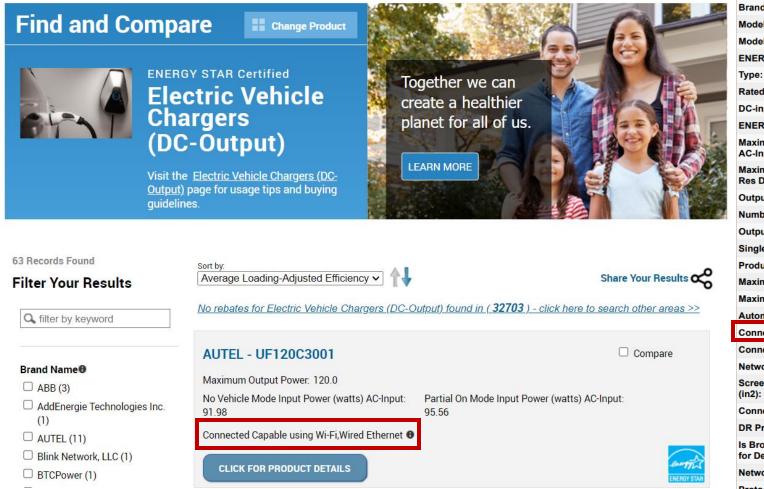


### **5. Electric Vehicle Charging Infrastructure** ENERGY STAR Connected Capable Criteria





### **5. Electric Vehicle Charging Infrastructure** ENERGY STAR Connected Capable Criteria





#### ENERGY STAR CERTIFIED Electric Vehicle Chargers (DC-Output)

#### AUTEL - UF120C3001 : UF120C3001

#### Specifications

opeonications	
Brand Name:	AUTEL
Model Name:	UF120C3001
Model Number:	UF120C3001
ENERGY STAR Unique ID:	2507636
Туре:	DC-output (AC-input)
Rated Input Voltage (V) AC-Input:	480
DC-input or AC-input:	AC-input
ENERGY STAR Partner:	Autel Digital Power Co., Ltd.
Maximum Nameplate Output Current (A) AC-Input:	200
Maximum Measured Luminance of the High Res Display (candelas per m2):	252.0
Output Cord Length (ft.):	25
Number of Outputs:	1
Output Cord Gauge (AWG):	1
Single Phase or Three Phase:	Three Phase
Product Configuration:	All-in-One Product Configuration
Maximum Available Output Power:	120000
Maximum Output Power:	120.0
Automatic Brightness Control Capable?:	No
Connected Capable:	Yes
Connects Using:	Wi-Fi,Wired Ethernet
Network Connection Types Available:	Gigabit Ethernet,Wi-Fi,Cellular
Screen Area, if EVSE has high res display (in2):	311.67
Connector Type:	Combined Charging System (CCS)
DR Protocol:	Open Charge Point Protocol (OCPP)
Is Broadband Internet Connection Needed for Demand Response?:	No
Network Security Standards:	ETSI EN 303 645
Protocols Used to Support Smart Charging:	SAE J1772,ISO 15118-2 or later
Integral Battery Bank:	No
Product Features:	None
Idle Mode Input Power (watts) AC- Input:	315.0

### 5.2 - EV CHARGERS & EV-CAPABLE SPACES

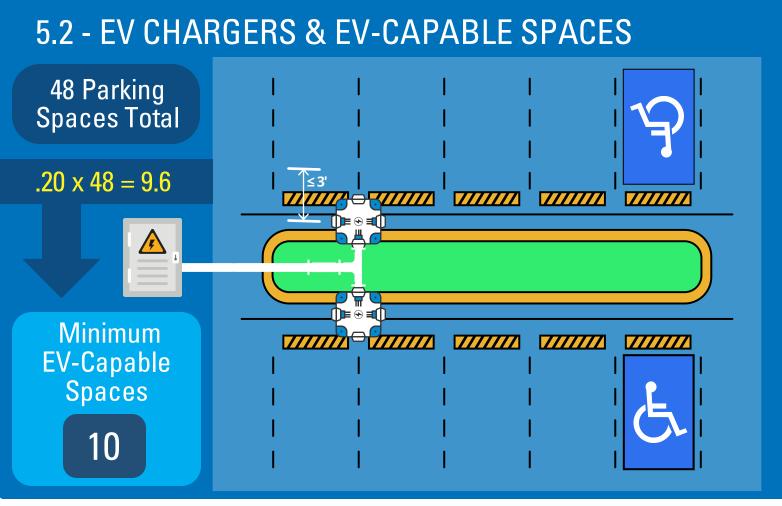


### 5.2.2 EV-Capable:

Conduit is installed that runs continuously from the electrical panel to a junction box that terminates within 3 feet of at least 20% of the development's parking spaces <sup>13</sup> <sup>14</sup> <sup>15</sup>







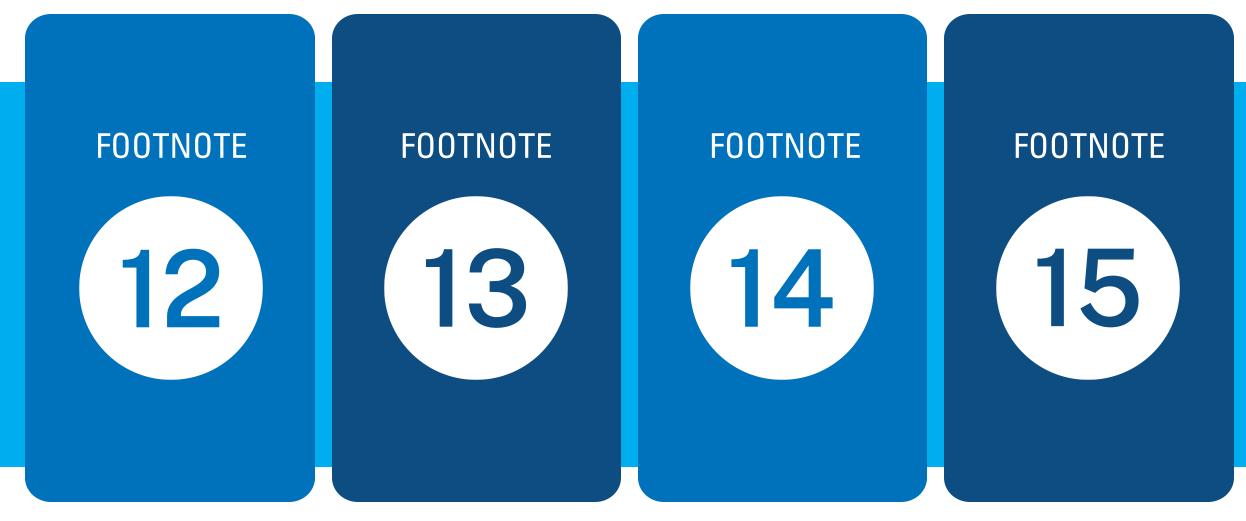
### 5.2.2 EV-Capable:

Conduit is installed that runs continuously from the electrical panel to a junction box that terminates within 3 feet of at least 20% of the development's parking spaces <sup>13</sup> <sup>14</sup> <sup>15</sup>





#### 5.2 - EV CHARGERS & EV-CAPABLE SPACES





#### 5.2 - EV CHARGERS & EV-CAPABLE SPACES

FOOTNOTE



#### **FOOTNOTE 12**

EV Chargers that contain two charging ports may be counted as two chargers, so long as the connectors can reach and charge EVs in two parking spaces simultaneously.



#### 5.2 - EV CHARGERS & EV-CAPABLE SPACES



### **FOOTNOTE 13**

When calculating the number of EV chargers and EV-Capable spaces required, include all parking spaces in the development except for one and twofamily dwellings' private driveways or garages that must comply with Item 5.1. For this purpose, the "development" includes the combined areas covered by the project's site permit and zoning permit. The number of required compliant spaces should be rounded up to the nearest whole number.

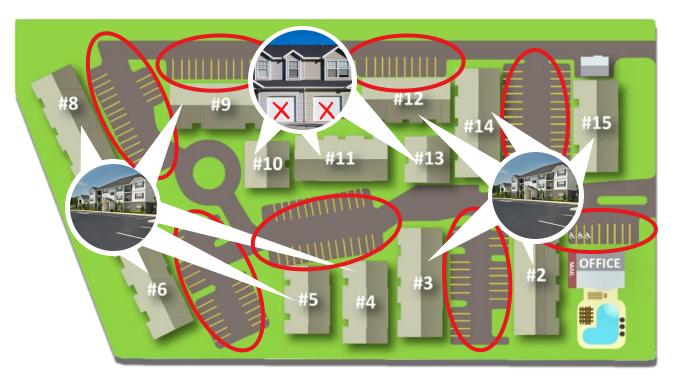


5.2.1 - Calculating the Number of Parking Spaces

### **EXAMPLE 1**

Multiple Multifamily Buildings

• What are the requirements for multiple buildings in a community/development?





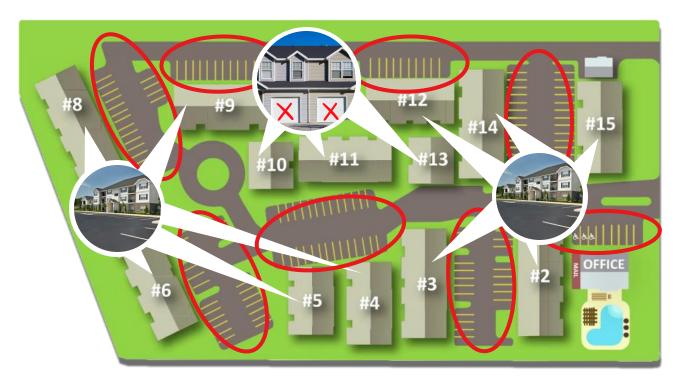
5.2.1 - Calculating the Number of Parking Spaces

### **EXAMPLE 1**

Multiple Multifamily Buildings

• What are the requirements for multiple buildings in a community/development?

ANSWER: It does not matter how many buildings there are. All spaces within a development count towards the total number of spaces, excluding those which must comply with 5.1 (single-and two-family dwellings with private driveways or garages).





#### **EXAMPLE 2**

Assigned parking spots in a shared parking area

• Which requirement should be followed?





#### **EXAMPLE 2**

Assigned parking spots in a shared parking area

• Which requirement should be followed?

ANSWER: May use approach in 5.2, even if parking spots are assigned to an apartment, or even purchased as part of a condo. Remember though that 5.1 can optionally be followed for any project.

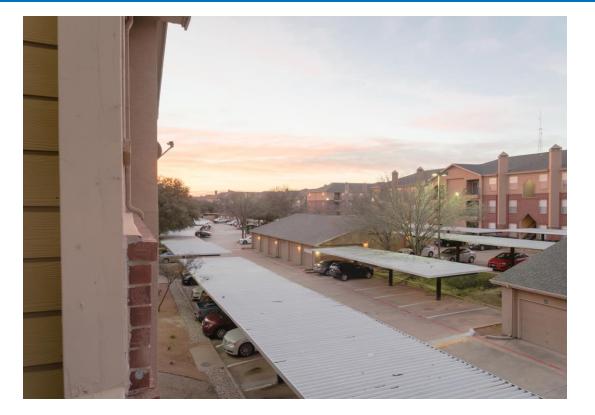




#### **EXAMPLE 3**

**Detached Rented Garages** 

• Which requirement should be followed?



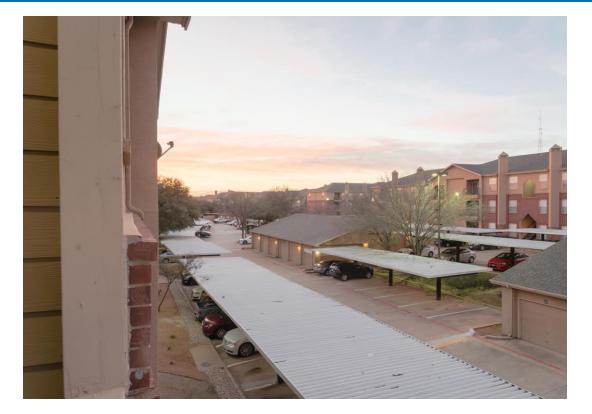


#### **EXAMPLE 3**

**Detached Rented Garages** 

• Which requirement should be followed?

ANSWER: These are just like assigned parking spaces. The only potential difference is that for multi-car garages, each space in the garage would count as a space. Meeting the EV-Ready requirement of 5.1 for one space in the garage would take care of the garage and remove the spaces from the total count in 5.2.2.





#### 5.2 - EV CHARGERS & EV-CAPABLE SPACES

#### FOOTNOTE 14

An EV-Ready parking space qualifies as EV-Capable. EV Chargers also qualify as EV-Capable, except those required to meet 5.2.1.







### **5. Electric Vehicle Charging Infrastructure** 5.2.2 EV-Capable

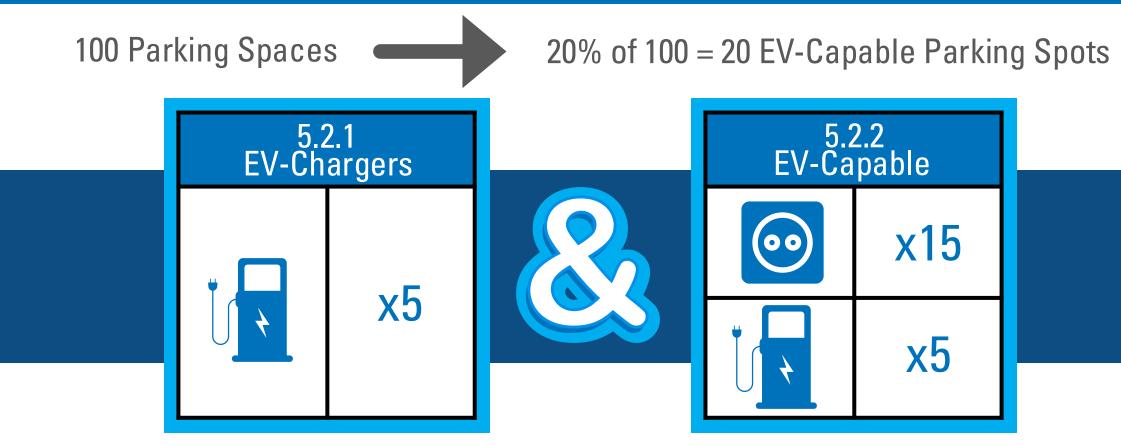
# **FOOTNOTE 14 EXAMPLE 100 Parking Spaces** 20% of 100 = 20 EV-Capable Parking Spots 5.2.2 EV-Capable 5.2.1 EV-Chargers x5 x20 00



### **5. Electric Vehicle Charging Infrastructure** 5.2.2 EV-Capable



#### **FOOTNOTE 14 EXAMPLE**





#### 5.2 - EV CHARGERS & EV-CAPABLE SPACES

#### **FOOTNOTE 15**

**Projects with a common area** electrical room may have the conduit terminate anywhere within the electrical room. Parking spots in a covered garage are deemed EV-Capable if the conduit terminates anywhere within the garage on that parking level.



### FOOTNOTE

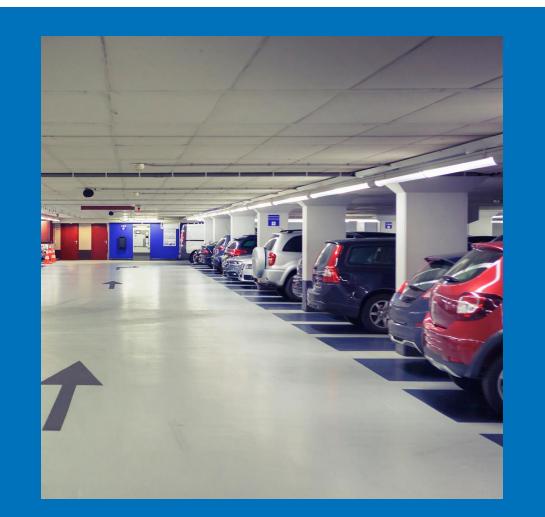
15



#### 5.2 - EV CHARGERS & EV-CAPABLE SPACES

#### **FOOTNOTE 15**

Projects with a common area electrical room may have the conduit terminate anywhere within the electrical room. Parking spots in a covered garage are deemed EV-**Capable if the conduit** terminates anywhere within the garage on that parking level.



### FOOTNOTE

15



# CERTIFICATION PROCESS HOW TO REPORT



#### **Certification Process**

			ERGY STAR NextGen	Initial House Design			I Settings I Log out				
General Info Envelope Fenestration Mecha	nical Water L	ighting & Appliances Infiltration Onsite Generati	on Codes & Progra	ums Usage					Compliance Areas	Energy Note	es
								🕜 Help	Quick	Results	Change
Code 2006 IECC Mandatory Checklist 2009 IECC Mandatory Checklist 2012 IECC Mandatory Checklist		HVAC Design Report HVAC Commissioning Checklist	Ne Ne	RGY STAR NextGen extGen Version 1.0 tter Field Checklist		~	Other Indoor airPLUS Requirements EPA WaterSense Certification	0	HERS® Energy Rating Index: Carbon Index:	i 33 i 33	0
2015 IECC Mandatory Checklist 2018 IECC Mandatory Checklist 2021 IECC Required Items IECC Slab-edge Insulation Exception (i) 2021 IECC Window Exception (i) Use Weather Station (i) (Elevation/Wind) New York 2016 Mandatory Requirements New York 2020 Mandatory Requirements		(Uptional)         Water Management System Builder         Requirements         Basement SAF Exclusion         Basement Area Excluded [ft²]         Image: Comparison of the second seco	2         DOE           Bu         Bu           1         Ins           0         0           0         EN           1         Lig           0         EN           1         Lig           0         EN           1         Lig           0         EN           1         Lig           0         EN           0         Pa           20         Op           Wa         20           Op         Op	Zero Energy Ready Home Provide ID #	gram i i i i i i i i i i i i i	<ul> <li></li> &lt;</ul>			Annual Energy Bill HERS ENERGY STAR v3.2 ENERGY STAR v3.2 ENERGY STAR v3.1 ENERGY STAR Next Tests compliance of ENERGY STAR Next Requirements. ENERGY STAR N Rater Field Chec Checklist ENERGY STAR M Blower Fan Airfle Blower Fan Watt Grade Refrigerant Char ENERGY STAR H Water Heater Heat Pump Wate Tank Size Electric Cooktop	the tktGen v1.0 extGen dist ore eat Pump w Grade Draw ge Grade eat Pump r Heater	
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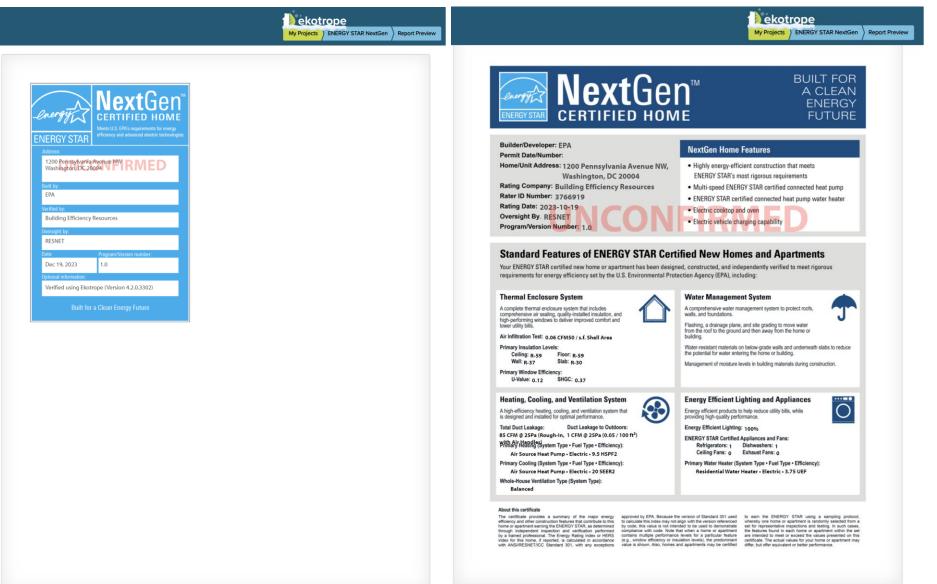
#### **Certification Process**

	🚺 ekotrope	My Projects ENERGY STAR Next	Gen Vinitial House Design			I Settings I Log o	ut		
General Info Envelope Fenestration Mechanic	al Water Lighting & Appliances Infiltration	Onsite Generation Codes & Pro	ograms Usage					Compliance Areas Energy	Notes
		_					📀 Help	Quick Result	S Change
Code 2006 IECC Mandatory Checklist 2009 IECC Mandatory Checklist 2012 IECC Mandatory Checklist	ENERGY STAR           Rater Design Review Checklist and Rater Field Checklist           HVAC Design Report           HVAC Commissioning Checklist		NERGY STAR NextGen           NextGen Version         1.0           Rater Field Checklist         1.0	۷		er door airPLUS Requirements PA WaterSense Certification		HERS® Energy Rating i 33 Index: i 33 Carbon Index: i 33	0
2015 IECC Mandatory Checklist 2018 IECC Mandatory Checklist 2021 IECC Required Items	(Optional)     Water Management System Builder     Requirements     Basement SAF Exclusion	€	DOE Zero Energy Ready Home Prog Builder ID # (i) 1230 Version 1	ram				Annual Energy Bill (1) \$2,951 HERS ENERGY STAR v3.2	\$0
IECC Slab-edge Insulation Exception (1) 2021 IECC Window Exception (1) Use Weather Station Ele (Elevation/Wind) New York 2016 Mandatory Requirements New York 2020 Mandatory Requirements	Basement Area Excluded [ft²]       ENERGY STAR Certained Appliances       vation ~     Qualifying Refrigerators       Qualifying Ceiling Fans       Qualifying Exhaust Fans       Qualifying Dishwashers	i 961	High-Performance Windows Insulation Optimized Duct Location Water Efficiency ENERGY STAR Appliances	2 2 2 1 2 1 2				ENERGY STAR v3.1 ENERGY STAR NextGen v1.0 Tests compliance of the ENERGY STAR NextGen v1.0 National Program Requirements.	
	Qualifying Clothes Washers Qualifying Clothes Dryers		Lighting – 80% LEDs ENERGY STAR Fans Renewable Ready - PV Override Basement SAF Exclusion Basement Area Excluded [ft <sup>2</sup> ]	2 2 i 2				ENERGY STAR NextGen Rater Field Checklist Checklist ENERGY STAR Core Certification ENERGY STAR Heat Pump Blower Fan Airflow Grade	© ©
		v	Version 2 (Single Family) High-Performance Windows	i <u>901</u>				Blower Fan Watt Draw Grade Refrigerant Charge Grade	
			Window Elevation Exception (i No Passive Solar Design	(i) 🗹	~			ENERGY STAR Heat Pump Water Heater Heat Pump Water Heater	$\bigcirc$
			2021 UA Optimized Duct Location Water Heating Efficiency					Tank Size Electric Cooktop & Oven	<ul><li>⊘</li><li></li></ul> <li>✓</li>
			ENERGY STAR Appliances	<ul> <li>Image: Image: Ima</li></ul>				Update Change co	des
🗙 Cancel 🛷 Save 🕹 Close		C <sup>al</sup> Rotate 4	5 Deg. 🦻 Rotate 45 Deg.	Hirror E-W	Mirror N-S	() Find Worst Orientation			Quick Results

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ENERGY

#### **Certification Process**





### ENERGY STAR NextGen Certification Process

Report to HCO

ENERGY STAR	Home	My MESA Account 🗸	My Organization Information $ oldsymbol{ u}$	More 🗸	Q 🚨
Home	Detail			[	Printable View
Home Detail ID	2	nual Avg. Number of Homes Certified	Commitments		
Details Hor	me Reports	Deleted Home Reports			

#### Homes Reports Archive - Past Reporting Periods

Select	09/30/2023	•	Select	Submit	Refresh C	Export 🕁 🗸	Group	Filter <b>T</b>
Reporting Period:			Period	Jubinit			Match	

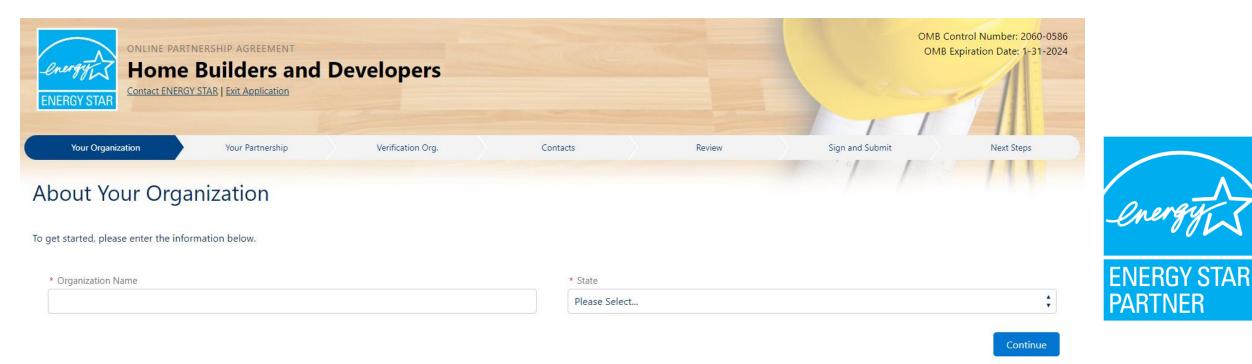
To view instructions on exports, group match, and filters, click here.

The table below displays ENERGY STAR and Indoor airPLUS certified homes and apartments registered in a Home Certification Organization (HCO) source system (e.g., Rating Registry) during the quarter ending on 09/30/2023 and attributed to your organization. Use the "Select Reporting Period" dropdown to access reports from different periods. Additional Reporting Information

ing Date <b>09/30/2</b>	023		0	<b>10</b> ENERGY STAR									
Qtr End Date	Pro	Buil	Rater	Rating T 🗸	н ~	C. ~	State	# ES	# NextGen	# IAP		Matching Sta	v
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#### **Certification Process**



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# Thank You!

 Learn more at: <u>www.energystar.gov/NextGenHomes</u>

