Heat pump split system standards	Ducted/less?	SEER 2	<u>SEER</u>	EER2	EER HS	PF2 <u>H</u> 5	SPF C	CoP@5°	Capacity Ratio	Additional Requirements and Notes
Minimum Standard Requirements (Good)										
Federal Minimum Standard	Both	14.3		-	7	.5				
EnergyStar v 6.1 minimum standard	Both	15.2		11.7	7	.8				

DUCTED Air Course Heat During												
DUCTED Air Source Heat Pumps										·		
State of Colorado Tax Credit												
(Pending confirmed details, EnergyStar												
Performance Listed)	Ducted	15.2		11.7		7.8				Tax Credit 10% Equipment only value, Sales Tax exempt as well (2.9% Savings)		
25C Tax Credit (CEE Tier 1, North)	Ducted	15.2		10		8.1		1.75	58% 17°/47° or 70% 5°/47°			
DUCTED Non-Cold Climate (Better)												
Xcel non-cold climate	Ducted	14.3	15	11	11.5	7.7	9					
Denver non-cold climate	Ducted	14.3	15	11	11.5	7.7	9					
CO Springs non-cold climate	Ducted	15.2	16	11.7	12.3	7.8	9.2					
Efficiency Works non-cold climate	Ducted	15.2	16			7.8	9.2			Changeover out temp ≤35°		
Tri-State non-cold climate	Ducted	15.2	16	11.7	12.3	7.8	9.2					
DUCTED Cold Climate (Best)												
EnergyStar v6.1, cold climate	Ducted	15.2	16			8.1	9.5	1.75	70% 5°/47°	Controls Verification Procedure		
Xcel cold climate	Ducted	17.1	18	11	11.5	8.1	9.5		70% 5°/47°			
Denver cold climate	Ducted	15.2	16	10	10.5	8.1	9.5	1.75	70% 5°/47°	Must be NEEP listed		
CO Springs cold climate	Ducted	14.3	15			7.7	9	1.75		Must be NEEP listed		
Efficiency Works cold climate	Ducted	15.2	16			8.1	9.5			Must be certified as Cold Climate by ESTAR, NEEP, AHRI, CEE. Change over of ≤5°		
Tri-State cold climate	Ducted	15.2				8.1				Must be variable speed		
Holy Cross Electric cold climate	Ducted					8.1		1.75				

DUCTLESS Air Source Heat Pumps											
State of Colorado Tax Credit											
(Pending confirmed details, EnergyStar											
Performance Listed)	Ductless	15.2	16	11.7	12.3	7.8	9.2			Tax Credit 10% Equipment only value, Sales Tax exempt as well (2.9% Savings)	
25C Tax Credit (CEE Tier 2, North)	Ductless	16		9		9.5		1.75	58% 17°/47° or 70% 5°/47°		
DUCTLESS Non-Cold Climate (Better)											
Xcel non-cold climate	Ductless	15	15	11	11	8.1	9				
Denver non-cold climate	Ductless	15	15	11	11	8.1	9				
CO Springs	Ductless	15.2	16	11.7	12.3	7.8	9.2				
Efficiency Works	Ductless										
Tri-State	Ductless					7.8					
DUCTLESS Cold Climate (Best)											
EnergyStar v6.1, cold climate	Ductless	15.2	15.2			8.5	9.4	1.75	70% 5°/47°	Controls Verification Procedure	
Xcel cold climate	Ductless	18	18	11	11	8.6	9.5		70% 5°/47°		
Denver cold climate	Ductless	16	16	9	9	9.5	10.6	1.75	70% 5°/47°	Must be NEEP listed	
CO Springs	Ductless	15	15			8.5	9.4	1.75			
Efficiency Works	Ductless	21	21			9.1	9.5			Must be certified as Cold Climate by ESTAR, NEEP, AHRI	
Tri-State	Ductless					8.5					
Holy Cross Electric	Ductless					9.5		1.75	58% 17°/47° or 70% 5°/47°		

Other National Standards

DOE cc Challenge 2-4 ton	Both	14.3			8.5		2.4	100% ratio @ 5°	
DOE cc Challenge >4 ton	Both	14.3			8.5		2.1	100% ratio @ 5°	
NEEP v 4.0	Ducted	14.3	15		7.7	9	1.75		
NEEP v 4.0	Ductless	15	15		8.5	10	1.75		Additional requirements listed in NEEP Spec v4.0
CEE Advanced Tier	Ducted	17		N/A	8.1		1.75	58% 17°/47° or 70% 5°/47°	"CEE Demand Response Criteria Level 2" / Energy Star Cold Climate Controls Verification
CEE Advanced Tier	Ductless	17		N/A	10		1.75	58% 17°/47° or 70% 5°/47°	"CEE Demand Response Criteria Level 2" / Energy Star Cold Climate Controls Verification