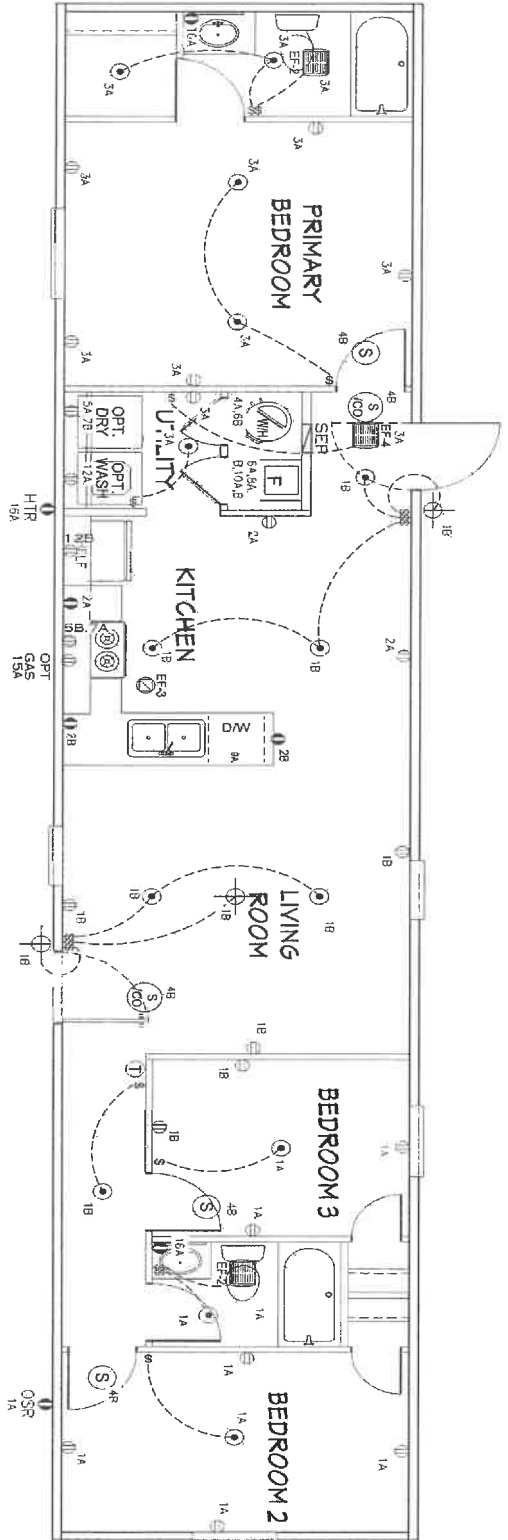




NOTES:

1. ALL CIRCUITS SHOWN ARE FOR REFERENCE AND MAY BE CHANGED BASED ON OPTIONAL COMPONENTS INSTALLED IN THE HOME.
2. REFER TO DPM MANUAL FOR SYMBOL CHART.
3. EITHER LIGHT OR RECEPTACLE MUST CONNECT TO SWITCH.
4. EFC-4 30 CFM EXHAUST FAN REQUIRED FOR THERMAL ZONE II OPERABLE GLASS.
5. EFC-4 30 CFM EXHAUST FAN REQUIRED FOR THERMAL ZONE II OPERABLE GLASS.
6. EFC-3-100 CFM RANGE EXHAUST FAN SWITCH AT HOOD.
7. EFC-4 WHOLE HOUSE VENTILATION REQUIREMENTS PER DPM MANUAL.
8. REFER TO DPM MANUAL OF THE UFG INSTALLATION INSTRUCTIONS FOR PROPER WIRE SIZE AND BREAKER SIZE FOR SPECIFIC APPLIANCE AND MODEL BEING INSTALLED.
9. ALL SMOKE ALARMS TO BE LOCATED ON THE CEILING.
10. CARBON MONOXIDE ALARMS ARE ONLY REQUIRED WHEN HOME HAS EITHER FUEL-BURNING APPLIANCE, IS GARAGE READY OR IS PERMANENTLY OCCUPIED. REFER TO DPM MANUAL FOR ADDITIONAL INFORMATION.
11. DIMENSIONS SHOWN ON PRINT ARE APPROXIMATE AND TO BE USED ONLY AS A GUIDELINE.

CIRCUIT	CIRCUIT #	WIRE	BREAKER	CIRCUIT	CIRCUIT #	WIRE	BREAKER	CIRCUIT	CIRCUIT #	WIRE	BREAKER
LIGHT RECP	1A, 3A, 13B, 14A	14-2	15-SP	DRYER	5A, 7B	SEE NOTE #8		BATHROOM	16A	12-2	20-SP
LIGHT RECP	1B, 3B, 14B	14-2	15-SP	WATER HEATER	4A, 6B	SEE NOTE #8		OPT GDISP	9B	SEE NOTE #8	
KITCHEN	2A, 2B	12-2	20-SP	RANGE	5B, 7A	SEE NOTE #8		OPT SPV WPLAC	11AB	SEE NOTE #8	
WASHER	12A	12-2	20-SP	FURNACE	6A, 8A, 10A, B	SEE NOTE #8		FREEZER	13A	SEE NOTE #8	
RANG HOOD/ MICROWAVE	15B	SEE NOTE #8		OPT DMASH	9A	SEE NOTE #8		OPT ELEC FIREPLACE	16B	SEE NOTE #8	
OPT GAS RANG	15A	SEE NOTE #8		REFER	4B	SEE NOTE #8					



REVISION	DATE

MODEL NAME NEED NAME	MODEL SQ. FT. 869
MODEL NO. TRS14663"?"	
BOX SIZE 14' x 66'	

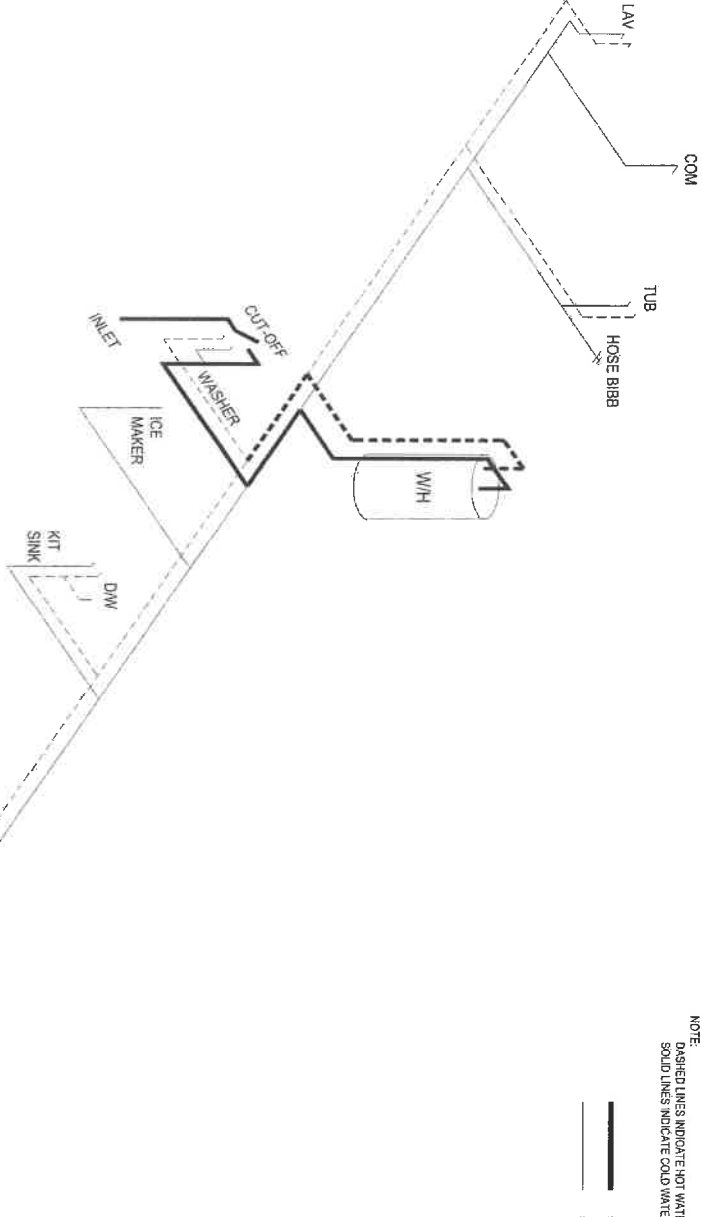
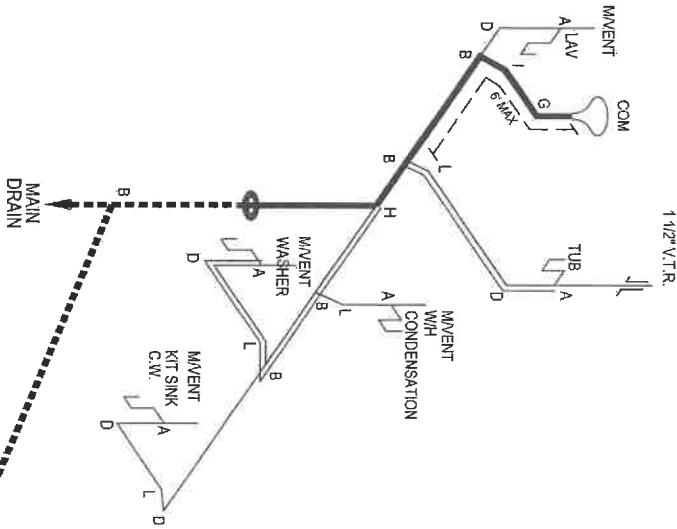
DRAWN BY Dustin Harville	DATE PRINTED 2/11/2025
DATE DRAWN 1/8/2025	



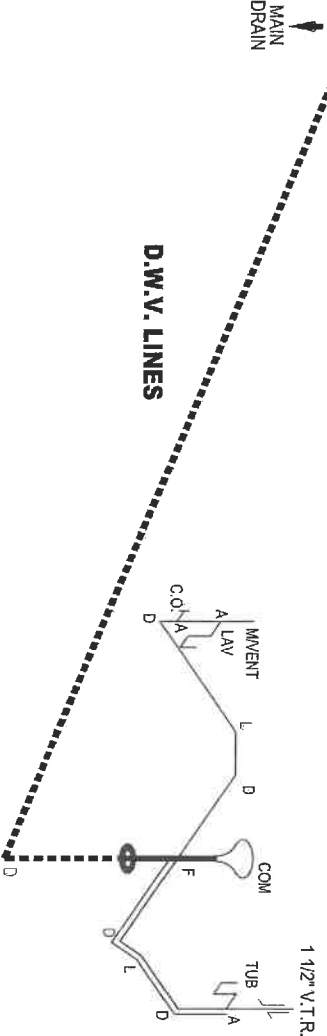
SHEET NAME ELEC. PLAN	SHEET NO. FI -1
SCALE 3/16"=1'	
DATE PRINTED 2/11/2025	
DATE DRAWN 1/8/2025	
DRAWN BY Dustin Harville	
MODEL NAME NEED NAME	
MODEL NO. TRS14663"?"	
BOX SIZE 14' x 66'	
MODEL SQ. FT. 869	

NOTE:
DASHED LINES INDICATE HOT WATER
SOLID LINES INDICATE COLD WATER

— = 3/4"
— = 1/2"



D.W.V. LINES



LEGEND	
A	SHORT TURN T-Y
B	LONG TURN T-Y
C	1/4 BEND
D	LONG SWEEP 1/4 BEND
E	45° ELL
F	DBL. SANITARY TEE
G	4X3 CLOSE ELL
H	DOUBLE ELL
I	22 1/2° ELL
J	45° Y
K	LONG TURN STREET ELBOW

DWV LINE SIZE CHART	
—	= 3"
—	= 2"
—	= 1 1/2"



REVISION	DATE

MODEL NAME NEED NAME	DATE PRINTED 2/7/2025
MODEL NO. TRS14663"2"	DATE DRAWN 1/8/2025
BOX SIZE 14' x 66'	DRAWN BY Dustin Harville
MODEL SQ. FT. 869	

SHEET NAME D.W.V. & SUPPLY	DATE PRINTED 2/7/2025
SHEET NO. PI-1	DATE DRAWN 1/8/2025
PLAN NO. TRU-1466-32-1	DRAWN BY Dustin Harville
SCALE 3/16"=1'	DATE PRINTED 2/7/2025
APPROVED BY NPA INC.	DATE DRAWN 1/8/2025

Project Information

For: TRU-1466-32-1, TRU

Cooling Equipment

Design Conditions

Outdoor design DB:	90.4°F	Sensible gain:	10975	Btuh	Entering coil DB:	76.6°F
Outdoor design WB:	73.3°F	Latent gain:	2964	Btuh	Entering coil WB:	63.7°F
Indoor design DB:	75.0°F	Total gain:	13939	Btuh		
Indoor RH:	50%	Estimated airflow:	580	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	SplitASHP	Model:	R4H5S18*K*AAA*+FEVA0024*+NAVVA43601CK
Manufacturer:	Smart Comfort		
Actual airflow:	580 cfm		
Sensible capacity:	13399 Btuh	122% of load	
Latent capacity:	3300 Btuh	111% of load	
Total capacity:	16699 Btuh	120% of load	SHR: 80%

Heating Equipment

Design Conditions

Outdoor design DB:	21.0°F	Heat loss:	16785	Btuh	Entering coil DB:	64.8°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	SplitASHP	Model:	R4H5S18*K*AAA*+FEVA0024*+NAVVA43601CK
Manufacturer:	Smart Comfort		
Actual airflow:	580 cfm		
Output capacity:	16800 Btuh	100% of load	
Supplemental heat required:	0 Btuh		
Capacity balance:	26 °F		
Economic balance:	-99 °F		

Meets all requirements of ACCA Manual S.



Project Information

For: TRU-1466-32-1, TRU

Notes: Duct Capacity: 19,333 Btuh's



Design Information

Weather: TN 25

Winter Design Conditions

Outside db 21 °F
Inside db 70 °F
Design TD 49 °F

Ventilation Method

Heating Summary

Structure 13662 Btuh
Ducts 0 Btuh
Central vent (60 cfm) 3123 Btuh
Outside air Humidification 0 Btuh
Piping 0 Btuh
Equipment load 16785 Btuh

Infiltration

Method Construction quality
Fireplaces
Simplified Average 0

Heating 891
Cooling 891
Volume (ft³) 7128
Air changes/hour 0.61
Equip. A/V/F (cfm) 72

Heating Equipment Summary

Make Smart Comfort
Trade 15 SEER2 R SERIES R410A HP
Model R4H5S18*K*AAA*
AHRI ref 210537859

Efficiency 7.5 HSPF2
Heating input 16800 Btuh @ 47°F
Heating output 27 °F
Temperature rise 580 cfm
Actual air flow 0.042 cfm/Btuh
Static pressure 0.30 in H2O
Space thermostat Capacity balance point = 26 °F
Backup: Smart Comfort FEVA002410
Input = 10 kW, Output = 34121 Btuh, 100 AFUE

Summer Design Conditions

Outside db 90 °F
Inside db 75 °F
Design TD 15 °F
Daily range M
Relative humidity 50 %
Moisture difference 34 gr/lb

Sensible Cooling Equipment Load Sizing

Structure 9994 Btuh
Ducts 0 Btuh
Central vent (60 cfm) 982 Btuh
Outside air Blower 0 Btuh
Use manufacturer's data 0.95 n
Rate/swing multiplier 10470 Btuh
Equipment sensible load

Latent Cooling Equipment Load Sizing

Structure 1639 Btuh
Ducts 0 Btuh
Central vent (60 cfm) 1325 Btuh
Outside air Equipment latent load 2964 Btuh
Equipment Total Load (Sen+Lat) 13434 Btuh
Req. total capacity at 0.70 SHR 1.2 ton

Cooling Equipment Summary

Make Smart Comfort
Trade 15 SEER2 R SERIES R410A HP
Model R4H5S18*K*AAA*
AHRI ref FEVA0024**+NAVAA43601CK
Coil 210537859
Efficiency 12.0 EER2, 15 SEER2
Sensible cooling 12180 Btuh
Latent cooling 5220 Btuh
Total cooling 17400 Btuh
Actual air flow 580 cfm
Air flow factor 0.058 cfm/Btuh
Static pressure 0.30 in H2O
Load sensible heat ratio 0.79

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

14x66

Version 20

BOX SIZE: 13.17 ft. x 66 ft.
AVG. SIDEWALL HEIGHT = 7 FEET
PERCENTAGE OF CEILING THAT IS VAULTED = 33.3%

Combined Uo for Data Plate = 0.0302

APPROVED BY
NIA
INC.
2/11/2025
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Zone	Thermal	Outdoor	Estair v3 &	ZERH	Heatloss
Temp (F)	UA	Uo	Compliant	BTUH/F	

Energy Star Version 2					
Thermal Zone	U-Value	Thermal Zone	U-Value	Thermal Zone	U-Value
-EHP-S	0.080	2-EHP-S	0.080	3-EHP-S	0.079
-GAS-S	0.080	2-GAS-S	0.080	3-GAS-S	0.071
-ENV-S	0.076	2-ENV-S	0.067	3-ENV-S	0.059
-EHP-M	0.074	2-EHP-M	0.074	3-EHP-M	0.074
-GAS-M	0.074	2-GAS-M	0.074	3-GAS-M	0.065
-ENV-M	0.071	2-ENV-M	0.064	3-ENV-M	0.056

Energy Star Version 3 & ZERH					
1 Single	0.076	2 Single	0.065	3 Single	0.057
Double	0.070	2 Double	0.063	3 Double	0.054

Energy Star v3 & ZERH Max Glass (sq ft)	
Th. Zone 1	337.0
Th. Zone 2	197.9
Th. Zone 3	96.8

Design Temperatures	
Furnace	Temp (F)
Economy	Outdoor
Temp (F)	
10kW	-57
12kW	-83
15kW	-121
40k Gas	-79
60k Gas	-154
80k Gas	-228

MP-14.TRU-1466-32-1.7

CLAYTON HOME BUILDING GROUP

14x66

Model Number	TRS1460	Drawing Number	TRU-1466-32-1	Version 20
Serial Number	X			

BOX SIZE: 13.17 ft. x 66 ft.

AVG. SIDEWALL HEIGHT = 7 FEET

PERCENTAGE OF CEILING THAT IS VAULTED = 33.3%

IN-FLOOR DUCT SYSTEM

UNHEATED FLOOR	WALL	FLAT / VAULT ROOF
INSULATION VALUES	R-11 OR / R-11 FW / R-11 BIB	R-13
DAPIA PAGE	THP-335	THP-515
U VALUE (BTU/H/SQ.FT.-F)	0.0436	0.0853
		0.0306/0.0328

Combined Uo for Data Plate = 0.0313

Area U Value UA

Front	Rear	Other Door	Other Door	OSB	Skylights	Standard	Option	Floor	Wall	Ceiling	Ext. Duct	Th. Zone 1:	Th. Zone 2:	Th. Zone 3:	Overhead TZ 1:	Overhead TZ 2:	Overhead TZ 3:	Supply
20.58	18.33	0.00	0.00	0.00	0.00	69.00	0.00	869.00	1000.42	869.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.189	0.189	0.300	0.300	0.000	0.330	0.300	0.300	0.044	0.085	0.0313	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.89	3.46	0.00	0.00	0.00	0.00	20.70	0.00	37.89	85.34	27.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Doors:

Window Glass Area:

Net:

Th. Zone 1:
Ext. Duct
0.00
Th. Zone 2:
Ext. Duct
0.00
Th. Zone 3:
Ext. Duct
0.00
Overhead TZ 1:
Supply
0.00
Overhead TZ 2:
Supply
0.00
Overhead TZ 3:
Supply
0.00



Outdoor Design Temp (F)	Thermal Zone	1	2	3
-11	0	-14		
178.51	178.51	178.51		
0.063	0.063	0.063		
UA	Uo			
289.30	289.30	289.30		
OK	OK	OK		
Heatloss	Compliant	NG		
BTU/H/F				

EStar v3 &

Thermal Zone	U-Value	Thermal Zone	U-Value	Thermal Zone	U-Value
1-EHP-S	0.080	2-EHP-S	0.080	3-EHP-S	0.079
1-GAS-S	0.080	2-GAS-S	0.080	3-GAS-S	0.071
1-ENV-S	0.076	2-ENV-S	0.067	3-ENV-S	0.059
1-EHP-M	0.074	2-EHP-M	0.074	3-EHP-M	0.074
1-GAS-M	0.074	2-GAS-M	0.074	3-GAS-M	0.065
1-ENV-M	0.071	2-ENV-M	0.064	3-ENV-M	0.056

Energy Star Version 2

Energy Star Version 3 & ZERH

1 Single	0.076	2 Single	0.065	3 Single	0.057
1 Double	0.070	2 Double	0.063	3 Double	0.054

Overhead Duct	Diameter	Length
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
13	0	0
15	0	0
Exterior Supply	Length	14
16	0	0
Exterior Return	Length	14
16	0	0
14	0	0
16	0	0
Exterior Return	Length	14
16	0	0

Energy Star v3 & ZERH	Max Glass (sq ft)
Th. Zone 1	251.0
Th. Zone 2	105.1
Th. Zone 3	0.0

Furnace Heating Outdoor Temp (F)	Economy Outdoor Temp (F)
-48	-13
-72	-29
-107	-54
-68	-27
-137	-75
-207	-124

10kW
12kW
15kW
40k Gas
60k Gas
80k Gas

MP-14.TRU-1466-32-1.7.1

CLAYTON HOME BUILDING GROUP

14x66

Model Number	TRS1460	Drawing Number	TRU-1466-32-1	Version 20
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Serial Number
X

BOX SIZE: 13.17 ft. x 66 ft.

AVG. SIDEWALL HEIGHT = 7 FEET

PERCENTAGE OF CEILING THAT IS VAULTED = 33.3%

IN-FLOOR DUCT SYSTEM

UNHEATED FLOOR	WALL	FLAT / VAULT ROOF
INSULATION VALUES (2) R-11 OR / R-11 FW / R-22 BIB	R-21	R-35 / R-35
DAPA PAGE	THP-3027	THP-1973 / THP-2505
U VALUE (BTUH/SQ.FT.-F)	0.0322	0.0294/0.0319
Combined Uo for Data Plate = 0.0302		

Area	U Value	UA
------	---------	----

Front	20.58	0.189	3.89
Rear	18.33	0.189	3.46
Other Door	0.00	0.300	0.00
Other Door	0.00	0.330	0.00
OSB	0.00	0.000	0.00
Skylights	0.00	0.330	0.00
Standard	69.00	0.300	20.70
Option	0.00	0.300	0.00
Floor	869.00	0.032	27.98
Wall	1000.42	0.055	54.62
Ceiling	869.00	0.0302	26.27
Th. Zone 1:	Ext. Duct	0.00	0.00
Th. Zone 2:	Ext. Duct	0.00	0.00
Th. Zone 3:	Ext. Duct	0.00	0.00
Overhead TZ 1:	Supply	0.00	0.00
Overhead TZ 2:	Supply	0.00	0.00
Overhead TZ 3:	Supply	0.00	0.00

Doors:

Window Glass Area:

Net:



Outdoor Design Temp (F)	11	0	-14
Thermal Zone	1	2	3
UA	136.93	136.93	136.93
Uo	0.048	0.048	0.048
ZERH Heatloss BTUH/F	OK	OK	OK
EStar v3 &	247.80	247.80	247.80

Thermal Zone	1-EHP-S	0.080	2-EHP-S	0.080	3-EHP-S	0.079
Thermal Zone	1-GAS-S	0.080	2-GAS-S	0.080	3-GAS-S	0.071
Thermal Zone	1-ENV-S	0.076	2-ENV-S	0.067	3-ENV-S	0.059
Thermal Zone	1-EHP-M	0.074	2-EHP-M	0.074	3-EHP-M	0.074
Thermal Zone	1-GAS-M	0.074	2-GAS-M	0.074	3-GAS-M	0.065
Thermal Zone	1-ENV-M	0.071	2-ENV-M	0.064	3-ENV-M	0.056

1 Single	0.076	2 Single	0.063	3 Single	0.057
1 Double	0.070	2 Double	0.063	3 Double	0.054

UNHEATED FLOOR	WALL	FLAT / VAULT ROOF
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Overhead Duct

Diameter	Length
4	0
5	0
6	0
7	0
8	0
9	0
10	0
13	0
15	0
Exterior Supply	Length
14	0
16	0
Exterior Return	Length
14	0
16	0

Energy Star v3 & ZERH	Max Glass (sq ft)
Th. Zone 1	397.6
Th. Zone 2	270.0
Th. Zone 3	177.2

Furnace Heating Outdoor Temp (F)	-68
10kW	-26
12kW	-46
15kW	-75
40k Gas	-43
60k Gas	-91
80k Gas	-156

MP-14.TRU-1466-32-1.7.2