June 17, 2022

Mr. Mike Hamm, PE
State of North Carolina
Department of Insurance
Manufactured Building Division
1202 Mail Service Center
Raleigh, NC 27699-1202

RE: CMH Manufacturing, Inc. #958
Model: 5530-28W-G-4BR-NC

Dear Mr. Hamm,

Enclosed, you will find one (1) copy with the above-mentioned project for your files.

Should you have any questions or comments, please contact me at your earliest convenience.

Sincerely,

David Richter

David Richter
Account Manager

ICC NTA, LLC Office • 305 N. Oakland Ave., Nappanee, IN 46550, US

CMH
Manufacturing, Inc.
engineering department - modular

APPROVED BY
NTA 6/17/2022
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David Richter

Date:
6/17/2022

TYPE : MODULAR

MODEL PLAN INDEX

Model #	***5530-28W-4BR***	***State***
Manufacturer	*CMH Manufacturing, Inc.*	**NC**
Brand Name	*CLAYTON*	
Unit Size	*26'-8" x 64'-0"*	
Description	*4 BEDROOM / 2 BATH*	

Category	Document Description	Page or Sheet #
Index	*Model Plan Index*	**IX-1**
Technical Sheet	*Light & Vent*	**TS-1**
Technical Sheet	*Heat Loss Calc*	**ATTACHED**
Technical Sheet	*HVAC System Calc*	**ATTACHED**
Technical Sheet	*Electrical Load Calc*	**TS-5**
Model Plan	*Cover Sheet*	**1-0**
Model Plan	*Cross Section / Fastening Schedule*	**1-0.2**
Model Plan	*Master Plan*	**1-1**
Model Plan	*HVAC Layout*	**4-1A**
Model Plan	*DWV Plumbing Schematic*	**8-1**
Model Plan	*Supply Plumbing*	**9-1**
Model Plan	*Electrical Plan*	**11-1**
Model Plan	*Exterior Elevations - Front & Right*	**20-1**
Model Plan	*Exterior Elevations - Rear & Left*	**20-2**
Model Plan	*OFF Frame Foundation*	**21-30PSF**
Model Plan	*ON Frame Foundation*	**21-PS**
Technical Sheet	*OFF & ON-Frame Foundation Calculations*	**ATTACHED**
Model Plan	*Dryer Installation Details*	**4-1**
Model Plan	*Electrical Legend*	**TS-6**
Technical Sheet	*PLUMBING PLAN*	**PLN-1.8**
Technical Sheet	*TRUSSES*	**ATTACHED**

SEE APPROVED MODULAR MANUAL FOR ;

1. SECTIONS	***2. TYPICAL DETAILS***
3. REQUIRED CONSTRUCTION METHODS	***4. MATERIALS***

CMH
Manufacturing, Inc.
engineering department - modular

	REVISIONS	
DATE :	REVISION BY :	GCK
June 16, 2022	REVISION DATE :	

TECHNICAL SHEET FOR LIGHT / VENT DATA

MODEL NUMBER	5530-28W-4BR
SIZE OF UNIT	26'-8" x 64'-0"
WINDOW SQ. FTG. STD.	
WINDOW SQ. FTG. W/ OPT.	
FIGURED FOR :	CLAYTON WINDOWS
PERCENTAGE OF LIGHT REQ'D.	8%
PERCENTAGE OF VENT REQ'D.	4%

		Square Footage Installed		Required		Percentage of Installed		Artifical	Artifical
Room	Area	Light	Vent	Light	Vent	Light	Vent	Light	Vent
MASTER BEDROOM	180.8	24.4	12.4	14.5	7.2	13.5%	6.9%		
LIVING ROOM	271.4	24.4	12.4	21.7	10.9	9.0%	4.6%		
BEDROOM 2	137.5	12.2	6.2	11.0	5.5	8.9%	4.5%		
BEDROOM 3	125.8	12.2	6.2	10.1	5.0	9.7%	4.9%		
KITCHEN	177.0	10.1	2.2	14.2	7.1	5.7%	1.2%	YES	YES
DINING ROOM	118.3	12.2	6.2	9.5	4.7	10.3%	5.2%		
BEDROOM 4	156.8	24.4	12.4	12.5	6.3	15.6%	7.9%		

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Load Short Form
Entire House
Clayton Homes

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Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ3~In Line Duct

Design Information

	Htg	Clg
Outside db (°F)	25	92
Inside db (°F)	70	75
Design TD (°F)	45	17
Daily range	-	M
Inside humidity (%)	30	50
Moisture difference (gr/lb)	18	35

Infiltration

Method	Simplified
Construction quality	Semi-tight
Fireplaces	0

HEATING EQUIPMENT

Make	Smart Comfort
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	10.0 kW
Heating output	34121 Btuh
Temperature rise	29 °F
Actual air flow	1113 cfm
Air flow factor	0.047 cfm/Btuh
Static pressure	0.30 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Smart Comfort
Trade	13 SEER R SERIES R410A AC
Cond	R4A336GKH
Coil	FED003610+NADA43601CK
AHRI ref	0
Efficiency	11.5 EER, 13 SEER
Sensible cooling	23380 Btuh
Latent cooling	10020 Btuh
Total cooling	33400 Btuh
Actual air flow	1113 cfm
Air flow factor	0.056 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.81

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
BR4	200	3466	2654	162	147
Bath2	53	679	284	32	16
Util	68	1102	1084	52	60
DinRm/Kit	316	3651	3639	171	202
M.Clo	58	584	247	27	14
M.Bath	113	2301	1504	108	83
BR2	151	2933	2035	137	113
Clo	67	0	0	0	0
BR3	144	2063	1730	96	96
LivRm	282	3572	3776	167	210
MBR	209	3446	3105	161	172
Hall	46	0	0	0	0

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

Entire House	1707	23796	20058	1113	1113
Other equip loads		4333	1637		
Equip. @ 0.97 RSM			21044		
Latent cooling			5197		
TOTALS	1707	28129	26241	1113	1113

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

Building Analysis
Entire House
Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ3~In Line Duct

Design Conditions

Location:
Charlotte/Douglas, NC, US
Elevation: 768 ft
Latitude: 35°N

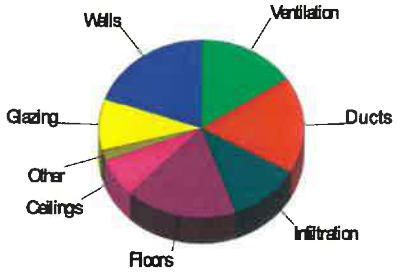
Outdoor:	**Heating**	**Cooling**
Dry bulb (°F)	25	92
Daily range (°F)	-	19 (M)
Wet bulb (°F)	-	74
Wind speed (mph)	15.0	7.5

Indoor:	**Heating**	**Cooling**
Indoor temperature (°F)	70	75
Design TD (°F)	45	17
Relative humidity (%)	30	50
Moisture difference (gr/lb)	17.9	34.8

Infiltration:	
Method	Simplified
Construction quality	Semi-tight
Fireplaces	0

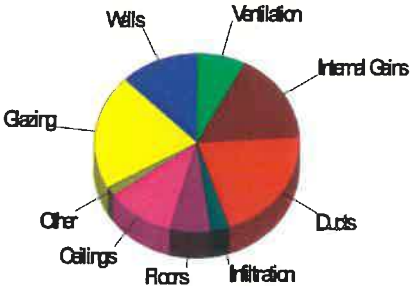
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	3.9	5523	19.6
Glazing	15.8	2631	9.4
Doors	14.4	547	1.9
Ceilings	1.2	1997	7.1
Floors	2.9	4915	17.5
Infiltration	2.0	3204	11.4
Ducts		4980	17.7
Piping		0	0
Humidification		0	0
Ventilation		4333	15.4
Adjustments		0	
Total		**28129**	**100.0**



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	1.9	2724	12.6
Glazing	27.1	4522	20.8
Doors	9.3	355	1.6
Ceilings	1.4	2338	10.8
Floors	0.8	1387	6.4
Infiltration	0.4	652	3.0
Ducts		4529	20.9
Ventilation		1637	7.5
Internal gains		3550	16.4
Blower		0	0
Adjustments		0	
Total		**21695**	**100.0**



Latent Cooling Load = 5197 Btuh
Overall U-value = 0.069 Btuh/ft²-°F

Data entries checked.

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Component Constructions
Entire House
Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ3~In Line Duct

Design Conditions

Location:
Charlotte/Douglas, NC, US
Elevation: 768 ft
Latitude: 35°N

Outdoor:	Heating	Cooling
Dry bulb (°F)	25	92
Daily range (°F)	-	19 (M)
Wet bulb (°F)	-	74
Wind speed (mph)	15.0	7.5

Indoor:	Heating	Cooling
Indoor temperature (°F)	70	75
Design TD (°F)	45	17
Relative humidity (%)	30	50
Moisture difference (gr/lb)	17.9	34.8

Infiltration:

Method	Simplified
Construction quality	Semi-tight
Fireplaces	0

Construction descriptions	Or	Area ft²	U-value Btuh/ft²-°F	Insul R ft²-°F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
Walls								
12D-0sw: Frm wall, vnl ext, 3/8" wood shth, r-15 cav ins, 1/2" gypsum board int fnsh, 2"x4" wood frm, 16" o.c. stud	n	240	0.086	15.0	3.87	929	1.91	458
	e	481	0.086	15.0	3.87	1862	1.91	919
	s	240	0.086	15.0	3.87	929	1.91	458
	w	466	0.086	15.0	3.87	1803	1.91	889
	all	1427	0.086	15.0	3.87	5523	1.91	2724
Partitions								
(none)								
Windows								
Clayton - Thermopane Low-E: Clayton - Thermopane Low-E; 50% blinds 45°, medium; 50% outdoor insect screen; 6.67 ft head ht	e	77	0.350	0	15.7	1213	26.3	2026
	w	90	0.350	0	15.8	1418	26.3	2368
	all	167	0.350	0	15.8	2631	26.3	4394
Doors								
CMH - Standard Door: CMH - Standard Door - Solid no storm	e	18	0.320	0	14.4	257	9.34	167
	w	20	0.320	0	14.4	289	9.34	188
	all	38	0.320	0	14.4	547	9.34	355
Ceilings								
16B-38ad: Attic ceiling, asphalt shingles roof mat, r-38 ceil ins, 1/2" gypsum board int fnsh		1707	0.026	38.0	1.17	1997	1.37	2338
Floors								
Floor R22: R-22 Insulation Flr floor, frm flr, 10" thkns, amb ovr		1707	0.064	22.0	2.88	4915	0.81	1387

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Project Summary
Entire House
Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ3~In Line Duct

Notes: R-38-15-22

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Design Information

Weather: Charlotte/Douglas, NC, US

Winter Design Conditions

Outside db	25	°F
Inside db	70	°F
Design TD	45	°F

Summer Design Conditions

Outside db	92	°F
Inside db	75	°F
Design TD	17	°F
Daily range	M	
Relative humidity	50	%
Moisture difference	35	gr/lb

Heating Summary

Structure	18816	Btuh
Ducts	4980	Btuh
Central vent (90 cfm) Outside air	4333	Btuh
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	28129	Btuh

Sensible Cooling Equipment Load Sizing

Structure	15529	Btuh
Ducts	4529	Btuh
Central vent (90 cfm) Outside air	1637	Btuh
Blower	0	Btuh
Use manufacturer's data	n	
Rate/swing multiplier	0.97	
Equipment sensible load	21044	Btuh

Infiltration

Method	Simplified
Construction quality	Semi-tight
Fireplaces	0

	Heating	Cooling
Area (ft²)	1707	1707
Volume (ft³)	15360	15360
Air changes/hour	0.26	0.14
Equiv. AVF (cfm)	67	36

Latent Cooling Equipment Load Sizing

Structure	1826	Btuh
Ducts	1297	Btuh
Central vent (90 cfm) Outside air	2074	Btuh
Equipment latent load	5197	Btuh
Equipment Total Load (Sen+Lat)	26241	Btuh
Req. total capacity at 0.70 SHR	2.5	ton

Heating Equipment Summary

Make	Smart Comfort
Trade	
Model	
AHRI ref	

Efficiency	100	EFF
Heating input	10.0	kW
Heating output	34121	Btuh
Temperature rise	29	°F
Actual air flow	1113	cfm
Air flow factor	0.047	cfm/Btuh
Static pressure	0.30	in H2O
Space thermostat		

Cooling Equipment Summary

Make	Smart Comfort
Trade	13 SEER R SERIES R410A AC
Cond	R4A336GKH
Coil	FED003610+NADA43601CK
AHRI ref	0

Efficiency	11.5 EER, 13 SEER	
Sensible cooling	23380	Btuh
Latent cooling	10020	Btuh
Total cooling	33400	Btuh
Actual air flow	1113	cfm
Air flow factor	0.056	cfm/Btuh
Static pressure	0.30	in H2O
Load sensible heat ratio	0.81	

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

Manual S Compliance Report

Entire House

Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ3~In Line Duct

Cooling Equipment

Design Conditions

Outdoor design DB:	92.0°F	Sensible gain:	21695	Btuh	Entering coil DB:	78.9°F
Outdoor design WB:	74.0°F	Latent gain:	5197	Btuh	Entering coil WB:	64.4°F
Indoor design DB:	75.0°F	Total gain:	26892	Btuh		
Indoor RH:	50%	Estimated airflow:	1113	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split AC			
Manufacturer:	Smart Comfort		Model: R4A336GKH+FED003610+NADA43601CK	
Actual airflow:	1113	cfm		
Sensible capacity:	23380	Btuh	108% of load	
Latent capacity:	10020	Btuh	193% of load	
Total capacity:	33400	Btuh	124% of load	SHR: 70%

Heating Equipment

Design Conditions

Outdoor design DB:	25.0°F	Heat loss:	28129	Btuh	Entering coil DB:	64.7°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Elec strip				
Manufacturer:	Smart Comfort		Model:		
Actual airflow:	1113	cfm			
Output capacity:	10.0	kW	121% of load	Temp. rise:	54 °F

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Meets all requirements of ACCA Manual S.

Duct System Summary
Entire House
Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

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Project Information

For: CZ3~In Line Duct

	Heating	Cooling
External static pressure	0.30 in H2O	0.30 in H2O
Pressure losses	0 in H2O	0 in H2O
Available static pressure	0.30 in H2O	0.30 in H2O
Supply / return available pressure	0.222 / 0.078 in H2O	0.222 / 0.078 in H2O
Lowest friction rate	0.085 in/100ft	0.085 in/100ft
Actual air flow	1113 cfm	1113 cfm
Total effective length (TEL)	353 ft	

Supply Branch Detail Table

Name		Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
BR2	h	2933	137	113	0.170	7.0	0x0	VlFx	30.8	100.0	st5
BR3	h	2063	96	96	0.192	6.0	0x0	VlFx	15.8	100.0	st5
BR4	h	1733	81	74	0.125	6.0	0x0	VlFx	28.4	150.0	st3
BR4-A	h	1733	81	74	0.469	5.0	0x0	VlFx	12.3	35.0	st3
Bath2	h	679	32	16	0.540	5.0	0x0	VlFx	6.2	35.0	st3
DinRm/Kit	c	1213	57	67	0.582	5.0	0x0	VlFx	3.2	35.0	st1
DinRm/Kit-A	c	1213	57	67	0.474	5.0	0x0	VlFx	11.8	35.0	st1
DinRm/Kit-B	c	1213	57	67	0.402	5.0	0x0	VlFx	20.3	35.0	st1
LivRm	c	1888	84	105	0.198	6.0	0x0	VlFx	12.3	100.0	st5
LivRm-A	c	1888	84	105	0.177	7.0	0x0	VlFx	25.3	100.0	st4
M.Bath	h	2301	108	83	0.336	6.0	0x0	VlFx	31.2	35.0	st1
M.Clo	h	584	27	14	0.368	5.0	0x0	VlFx	25.3	35.0	st1
MBR	c	1552	81	86	0.085	6.0	0x0	VlFx	46.1	215.0	st4
MBR-A	c	1552	81	86	0.171	6.0	0x0	VlFx	29.8	100.0	st4
Util	c	1084	52	60	0.590	5.0	0x0	VlFx	2.7	35.0	st3

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st4	Peak AVF	245	277	0.085	570	5.2	5 x 14	ShtMetl	st2
st5	Peak AVF	317	314	0.170	653	5.2	5 x 14	ShtMetl	st2
st2	Peak AVF	562	591	0.085	752	12.0	0 x 0	VinlFlx	
st3	Peak AVF	245	223	0.125	505	5.0	5 x 14	ShtMetl	
st1	Peak AVF	306	299	0.336	629	4.1	5 x 14	ShtMetl	

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb2	0x0	494	509	91.5	0.085	476	14.0	0x 0		VIFx	
rb1	0x0	620	604	80.3	0.097	580	14.0	0x 0		VIFx	

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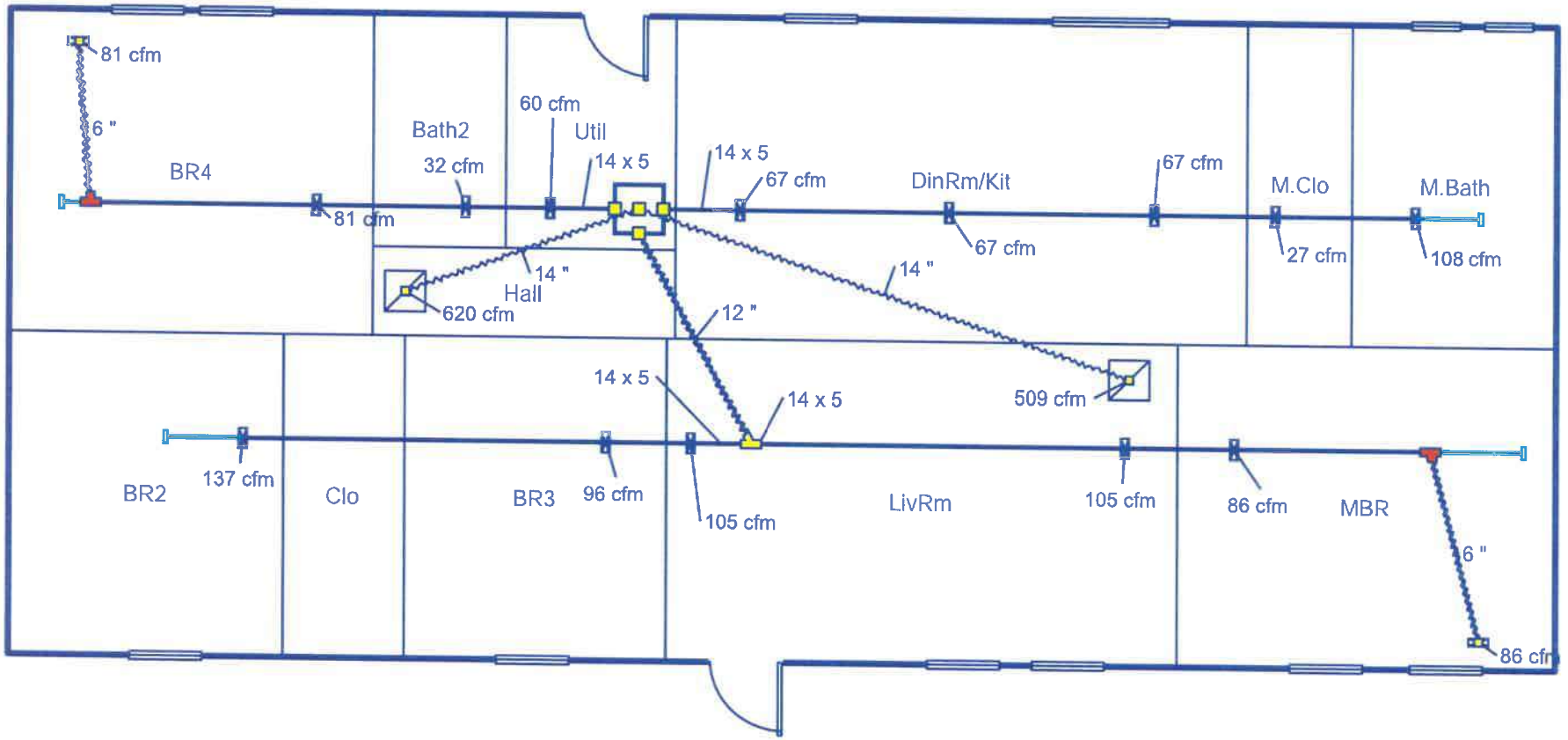
First Floor



Job #: 5530-28W-4BR
Performed by GCK for:
CZ3-In Line Duct

Clayton Homes
5000 Clayton Road
Maryville, TN 37804
Phone: 865-380-3000

Scale: 1 : 80
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Load Short Form
Entire House
Clayton Homes

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Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ4~In Line Duct

Design Information

	Htg	Clg
Outside db (°F)	24	92
Inside db (°F)	70	75
Design TD (°F)	46	17
Daily range	-	M
Inside humidity (%)	30	50
Moisture difference (gr/lb)	19	41

Infiltration

Method	Simplified
Construction quality	Semi-tight
Fireplaces	0

HEATING EQUIPMENT

Make	Smart Comfort
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	10.0 kW
Heating output	34121 Btuh
Temperature rise	28 °F
Actual air flow	1113 cfm
Air flow factor	0.045 cfm/Btuh
Static pressure	0.30 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Smart Comfort
Trade	13 SEER R SERIES R410A AC
Cond	R4A336GKH
Coil	FED003610+NADA43601CK
AHRI ref	0
Efficiency	11.5 EER, 13 SEER
Sensible cooling	23380 Btuh
Latent cooling	10020 Btuh
Total cooling	33400 Btuh
Actual air flow	1113 cfm
Air flow factor	0.055 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.79

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
BR4	200	3581	2668	162	147
Bath2	53	702	286	32	16
Util	68	1138	1090	52	60
DinRm/Kit	316	3771	3656	171	202
M.Clo	58	603	249	27	14
M.Bath	113	2378	1513	108	83
BR2	151	3031	2050	137	113
Clo	67	0	0	0	0
BR3	144	2130	1741	96	96
LivRm	282	3688	3798	167	210
MBR	209	3561	3124	161	172
Hall	46	0	0	0	0

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

Entire House	1707	24581	20175	1113	1113
Other equip loads		4522	1696		
Equip. @ 0.97 RSM			21302		
Latent cooling			5871		
TOTALS	1707	29103	27173	1113	1113

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David Richter

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

Building Analysis
Entire House
Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ4~In Line Duct

Design Conditions

Location:
Raleigh/Raleigh-dur, NC, US
Elevation: 436 ft
Latitude: 36°N

Outdoor:	Heating	Cooling
Drybulb (°F)	24	92
Daily range (°F)	-	19 (M)
Wet bulb (°F)	-	75
Wind speed (mph)	15.0	7.5

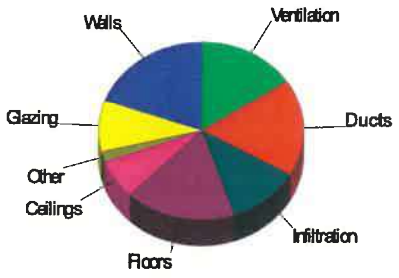
Indoor:	Heating	Cooling
Indoor temperature (°F)	70	75
Design TD (°F)	46	17
Relative humidity (%)	30	50
Moisture difference (gr/lb)	18.7	40.7

Infiltration:

Method	Simplified
Construction quality	Semi-tight
Fireplaces	0

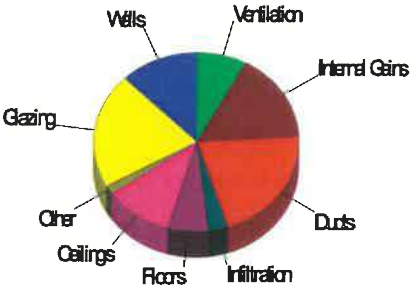
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	4.0	5694	19.6
Glazing	16.2	2712	9.3
Doors	14.8	564	1.9
Ceilings	1.2	2059	7.1
Floors	3.0	5068	17.4
Infiltration	2.0	3344	11.5
Ducts		5139	17.7
Piping		0	0
Humidification		0	0
Ventilation		4522	15.5
Adjustments		0	
Total		**29103**	**100.0**



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	1.9	2731	12.5
Glazing	27.2	4543	20.8
Doors	9.4	355	1.6
Ceilings	1.4	2341	10.7
Floors	0.8	1393	6.4
Infiltration	0.4	675	3.1
Ducts		4588	21.0
Ventilation		1696	7.8
Internal gains		3550	16.2
Blower		0	0
Adjustments		0	
Total		**21871**	**100.0**



Latent Cooling Load = 5871 Btuh
Overall U-value = 0.069 Btuh/ft²-°F

Data entries checked.

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Component Constructions
Entire House
Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ4~In Line Duct

Design Conditions

Location:
Raleigh/Raleigh-dur, NC, US
Elevation: 436 ft
Latitude: 36°N

Outdoor:	Heating	Cooling
Dry bulb (°F)	24	92
Daily range (°F)	-	19 (M)
Wet bulb (°F)	-	75
Wind speed (mph)	15.0	7.5

Indoor:	Heating	Cooling
Indoor temperature (°F)	70	75
Design TD (°F)	46	17
Relative humidity (%)	30	50
Moisture difference (gr/lb)	18.7	40.7

Infiltration:

Method	Simplified
Construction quality	Semi-tight
Fireplaces	0

Construction descriptions	Or	Area ft²	U-value Btuh/ft²-°F	Insul R ft²-°F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
Walls								
12D-0sw: Frm wall, vnl ext, 3/8" wood shth, r-15 cav ins, 1/2" gypsum board int fnsh, 2"x4" wood frm, 16" o.c. stud	n	240	0.086	15.0	3.99	958	1.91	459
	e	481	0.086	15.0	3.99	1920	1.91	921
	s	240	0.086	15.0	3.99	958	1.91	459
	w	466	0.086	15.0	3.99	1859	1.91	891
	all	1427	0.086	15.0	3.99	5694	1.91	2731
Partitions								
(none)								
Windows								
Clayton - Thermopane Low-E: Clayton - Thermopane Low-E; 50% blinds 45°, medium; 50% outdoor insect screen; 6.67 ft head ht	e	77	0.350	0	16.2	1251	26.4	2034
	w	90	0.350	0	16.2	1462	26.4	2376
	all	167	0.350	0	16.2	2712	26.4	4410
Doors								
CMH - Standard Door: CMH - Standard Door - Solid no storm	e	18	0.320	0	14.8	265	9.36	167
	w	20	0.320	0	14.8	298	9.36	188
	all	38	0.320	0	14.8	564	9.36	355
Ceilings								
16B-38ad: Attic ceiling, asphalt shingles roof mat, r-38 ceil ins, 1/2" gypsum board int fnsh		1707	0.026	38.0	1.21	2059	1.37	2341
Floors								
Floor R22: R-22 Insulation Flr floor, frm flr, 10" thkns, amb ovr		1707	0.064	22.0	2.97	5068	0.82	1393

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Project Summary
Entire House
Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ4~In Line Duct

Notes: R-38-15-22

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Design Information

Weather: Raleigh/Raleigh-dur, NC, US

Winter Design Conditions

Outside db	24 °F
Inside db	70 °F
Design TD	46 °F

Summer Design Conditions

Outside db	92 °F
Inside db	75 °F
Design TD	17 °F
Daily range	M
Relative humidity	50 %
Moisture difference	41 gr/lb

Heating Summary

Structure	19442 Btuh
Ducts	5139 Btuh
Central vent (90 cfm) Outside air	4522 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	29103 Btuh

Sensible Cooling Equipment Load Sizing

Structure	15588 Btuh
Ducts	4588 Btuh
Central vent (90 cfm) Outside air	1696 Btuh
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	0.97
Equipment sensible load	21302 Btuh

Infiltration

Method	Simplified
Construction quality	Semi-tight
Fireplaces	0

	Heating	Cooling
Area (ft²)	1707	1707
Volume (ft³)	15360	15360
Air changes/hour	0.26	0.14
Equiv. AVF (cfm)	67	36

Latent Cooling Equipment Load Sizing

Structure	1975 Btuh
Ducts	1446 Btuh
Central vent (90 cfm) Outside air	2450 Btuh
Equipment latent load	5871 Btuh
Equipment Total Load (Sen+Lat)	27173 Btuh
Req. total capacity at 0.70 SHR	2.5 ton

Heating Equipment Summary

Make	Smart Comfort
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	10.0 kW
Heating output	34121 Btuh
Temperature rise	28 °F
Actual air flow	1113 cfm
Air flow factor	0.045 cfm/Btuh
Static pressure	0.30 in H2O
Space thermostat	

Cooling Equipment Summary

Make	Smart Comfort
Trade	13 SEER R SERIES R410A AC
Cond	R4A336GKH
Coil	FED003610+NADA43601CK
AHRI ref	0
Efficiency	11.5 EER, 13 SEER
Sensible cooling	23380 Btuh
Latent cooling	10020 Btuh
Total cooling	33400 Btuh
Actual air flow	1113 cfm
Air flow factor	0.055 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.

Manual S Compliance Report
Entire House
Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ4~In Line Duct

Cooling Equipment

Design Conditions

Outdoor design DB:	92.4°F	Sensible gain:	21871	Btuh	Entering coil DB:	78.9°F
Outdoor design WB:	75.2°F	Latent gain:	5871	Btuh	Entering coil WB:	64.6°F
Indoor design DB:	75.0°F	Total gain:	27742	Btuh		
Indoor RH:	50%	Estimated airflow:	1113	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split AC			
Manufacturer:	Smart Comfort	Model:	R4A336GKH+FED003610+NADA43601CK	
Actual airflow:	1113	cfm		
Sensible capacity:	23380	Btuh	107% of load	
Latent capacity:	10020	Btuh	171% of load	
Total capacity:	33400	Btuh	120% of load	SHR: 70%

Heating Equipment

Design Conditions

Outdoor design DB:	23.6°F	Heat loss:	29103	Btuh	Entering coil DB:	64.5°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Elec strip				
Manufacturer:	Smart Comfort	Model:			
Actual airflow:	1113	cfm			
Output capacity:	10.0	kW	117% of load	Temp. rise:	53 °F

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Meets all requirements of ACCA Manual S.

Duct System Summary
Entire House
Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ4~In Line Duct

	Heating	Cooling
External static pressure	0.30 in H2O	0.30 in H2O
Pressure losses	0 in H2O	0 in H2O
Available static pressure	0.30 in H2O	0.30 in H2O
Supply / return available pressure	0.222 / 0.078 in H2O	0.222 / 0.078 in H2O
Lowest friction rate	0.085 in/100ft	0.085 in/100ft
Actual air flow	1113 cfm	1113 cfm
Total effective length (TEL)	353 ft	

Supply Branch Detail Table

Name		Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
BR2	h	3031	137	113	0.170	7.0	0x0	VlFx	30.8	100.0	st5
BR3	h	2130	96	96	0.192	6.0	0x0	VlFx	15.8	100.0	st5
BR4	h	1790	81	74	0.125	6.0	0x0	VlFx	28.4	150.0	st3
BR4-A	h	1790	81	74	0.469	5.0	0x0	VlFx	12.3	35.0	st3
Bath2	h	702	32	16	0.540	5.0	0x0	VlFx	6.2	35.0	st3
DinRm/Kit	c	1219	57	67	0.582	5.0	0x0	VlFx	3.2	35.0	st1
DinRm/Kit-A	c	1219	57	67	0.474	5.0	0x0	VlFx	11.8	35.0	st1
DinRm/Kit-B	c	1219	57	67	0.402	5.0	0x0	VlFx	20.3	35.0	st1
LivRm	c	1899	84	105	0.198	6.0	0x0	VlFx	12.3	100.0	st5
LivRm-A	c	1899	84	105	0.177	7.0	0x0	VlFx	25.3	100.0	st4
M.Bath	h	2378	108	83	0.336	6.0	0x0	VlFx	31.2	35.0	st1
M.Clo	h	603	27	14	0.368	5.0	0x0	VlFx	25.3	35.0	st1
MBR	c	1562	81	86	0.085	6.0	0x0	VlFx	46.1	215.0	st4
MBR-A	c	1562	81	86	0.171	6.0	0x0	VlFx	29.8	100.0	st4
Util	c	1090	52	60	0.590	5.0	0x0	VlFx	2.7	35.0	st3

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st4	Peak AVF	245	277	0.085	570	5.2	5 x 14	ShtMetl	st2
st5	Peak AVF	317	314	0.170	653	5.2	5 x 14	ShtMetl	st2
st2	Peak AVF	562	591	0.085	753	12.0	0 x 0	VinlFlx	
st3	Peak AVF	246	223	0.125	505	5.0	5 x 14	ShtMetl	
st1	Peak AVF	306	299	0.336	629	4.1	5 x 14	ShtMetl	

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb2	0x 0	494	509	91.5	0.085	476	14.0	0x 0		VlFx	
rb1	0x 0	620	604	80.3	0.097	580	14.0	0x 0		VlFx	

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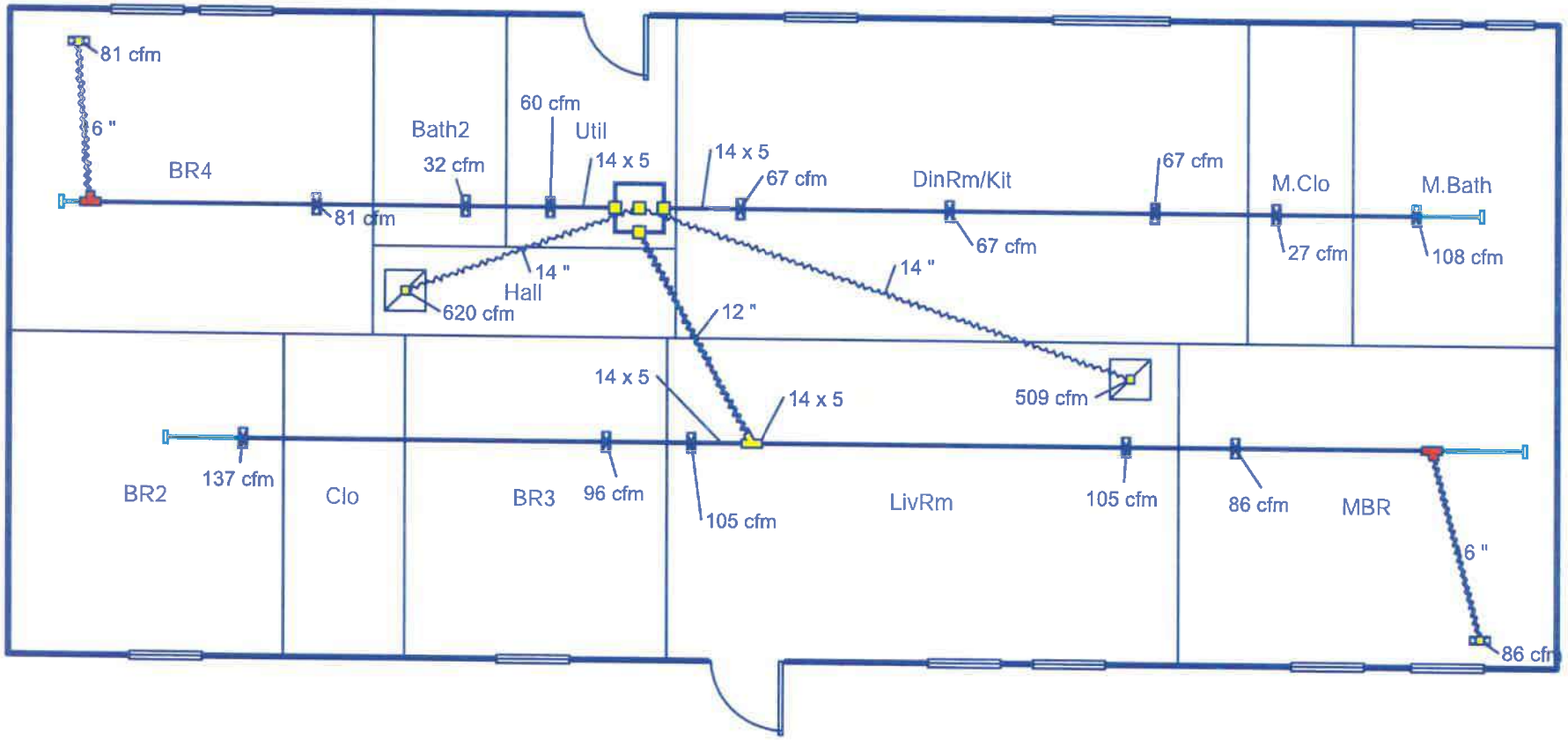
First Floor



Job #: 5530-28W-4BR
Performed by GCK for:
CZ4~In Line Duct

Clayton Homes
5000 Clayton Road
Maryville, TN 37804
Phone: 865-380-3000

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Clayton richfield

Load Short Form
Entire House
Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ5~In Line Duct

Design Information

	Htg	Clg
Outside db (°F)	19	86
Inside db (°F)	70	75
Design TD (°F)	51	11
Daily range	-	M
Inside humidity (%)	30	50
Moisture difference (gr/lb)	23	27

Infiltration

Method	Simplified
Construction quality	Semi-tight
Fireplaces	0

HEATING EQUIPMENT

Make	Smart Comfort
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	10.0 kW
Heating output	34121 Btuh
Temperature rise	35 °F
Actual air flow	947 cfm
Air flow factor	0.042 cfm/Btuh
Static pressure	0.30 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Smart Comfort
Trade	15 SEER HIGH EER R SERIES R410...
Cond	R4A530GKB
Coil	FED003610+NADA43601CK
AHRI ref	0
Efficiency	12.2 EER, 14 SEER
Sensible cooling	19880 Btuh
Latent cooling	8520 Btuh
Total cooling	28400 Btuh
Actual air flow	947 cfm
Air flow factor	0.047 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.83

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
BR4	200	3300	2551	140	120
Bath2	53	595	549	25	26
Util	68	1063	1366	45	65
DinRm/Kit	316	3327	3206	141	151
M.Clo	58	504	145	21	7
M.Bath	113	2225	1096	94	52
BR2	151	2752	2455	117	116
Clo	67	0	0	0	0
BR3	144	1862	3072	79	145
LivRm	282	3381	3139	144	148
MBR	209	3288	2467	140	116
Hall	46	0	0	0	0

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

Entire House	1707	22296	20046	947	947
Other equip loads		4666	997		
Equip. @ 0.91 RSM			19128		
Latent cooling			4162		
TOTALS	1707	26962	23291	947	947

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

Building Analysis
Entire House
Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ5~In Line Duct

Design Conditions

Location:
Asheville Municipal, NC, US
Elevation: 2169 ft
Latitude: 35°N

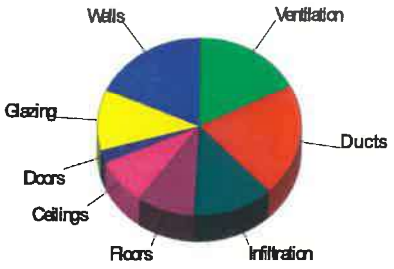
Outdoor:	Heating	Cooling
Dry bulb (°F)	19	86
Daily range (°F)	-	19 (M)
Wet bulb (°F)	-	71
Wind speed (mph)	15.0	7.5

Indoor:	Heating	Cooling
Indoor temperature (°F)	70	75
Design TD (°F)	51	11
Relative humidity (%)	30	50
Moisture difference (gr/lb)	23.0	27.4

Infiltration:	
Method	Simplified
Construction quality	Semi-tight
Fireplaces	0

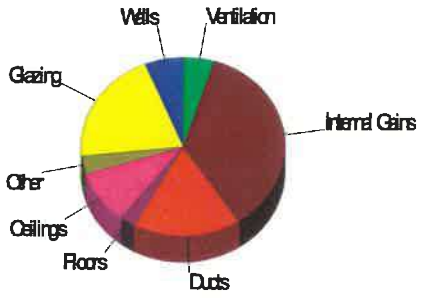
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	3.5	4949	18.4
Glazing	17.9	2981	11.1
Doors	16.3	620	2.3
Ceilings	1.3	2263	8.4
Floors	1.5	2484	9.2
Infiltration	2.1	3450	12.8
Ducts		5549	20.6
Piping		0	0
Humidification		0	0
Ventilation		4666	17.3
Adjustments		0	
Total		**26962**	**100.0**



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	0.9	1325	6.3
Glazing	25.8	4307	20.5
Doors	7.3	276	1.3
Ceilings	1.2	2052	9.8
Floors	0.3	531	2.5
Infiltration	0.2	397	1.9
Ducts		3608	17.1
Ventilation		997	4.7
Internal gains		7550	35.9
Blower		0	0
Adjustments		0	
Total		**21043**	**100.0**



Latent Cooling Load = 4162 Btuh
Overall U-value = 0.054 Btuh/ft²-°F

Data entries checked.

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Component Constructions
Entire House
Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ5~In Line Duct

Design Conditions

Location:
Asheville Municipal, NC, US
Elevation: 2169 ft
Latitude: 35°N

Outdoor:	**Heating**	**Cooling**
Dry bulb (°F)	19	86
Daily range (°F)	-	19 (M)
Wet bulb (°F)	-	71
Wind speed (mph)	15.0	7.5

Indoor:	**Heating**	**Cooling**
Indoor temperature (°F)	70	75
Design TD (°F)	51	11
Relative humidity (%)	30	50
Moisture difference (gr/lb)	23.0	27.4

Infiltration:

Method	Simplified
Construction quality	Semi-tight
Fireplaces	0

Construction descriptions	**Or**	**Area** ft²	**U-value** Btuh/ft²-°F	**Insul R** ft²-°F/Btuh	**Htg HTM** Btuh/ft²	**Loss** Btuh	**Clg HTM** Btuh/ft²	**Gain** Btuh
Walls								
12E-0sw: Frm wall, vnl ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud	n	240	0.068	19.0	3.47	832	0.93	223
	e	481	0.068	19.0	3.47	1669	0.93	447
	s	240	0.068	19.0	3.47	832	0.93	223
	w	466	0.068	19.0	3.47	1616	0.93	432
	all	1427	0.068	19.0	3.47	4949	0.93	1325
Partitions								
(none)								
Windows								
Clayton - Thermopane Low-E: Clayton - Thermopane Low-E; 50% blinds 45°, medium; 50% outdoor insect screen; 6.67 ft head ht	e	77	0.350	0	17.9	1375	24.4	1878
	w	90	0.350	0	17.9	1607	24.4	2194
	all	167	0.350	0	17.9	2981	24.4	4072
Doors								
CMH - Standard Door: CMH - Standard Door - Solid no storm	e	18	0.320	0	16.3	292	7.28	130
	w	20	0.320	0	16.3	328	7.28	146
	all	38	0.320	0	16.3	620	7.28	276
Ceilings								
16B-38ad: Attic ceiling, asphalt shingles roof mat, r-38 ceil ins, 1/2" gypsum board int fnsh		1707	0.026	38.0	1.33	2263	1.20	2052
Floors								
19A-30cvcp: Flr floor, frm flr, 10" thkns, carpet flr fnsh, r-30 cav ins, leaky crwl ovr		1707	0.034	30.0	1.46	2484	0.31	531

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Project Summary
Entire House
Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ5~In Line Duct

Notes: R-38-19-30

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Design Information

Weather: Asheville Municipal, NC, US

Winter Design Conditions

Outside db	19 °F
Inside db	70 °F
Design TD	51 °F

Summer Design Conditions

Outside db	86 °F
Inside db	75 °F
Design TD	11 °F
Daily range	M
Relative humidity	50 %
Moisture difference	27 gr/lb

Heating Summary

Structure	16747 Btuh
Ducts	5549 Btuh
Central vent (90 cfm) Outside air	4666 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	26962 Btuh

Sensible Cooling Equipment Load Sizing

Structure	16439 Btuh
Ducts	3608 Btuh
Central vent (90 cfm) Outside air	997 Btuh
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	0.91
Equipment sensible load	19128 Btuh

Infiltration

Method	Simplified
Construction quality	Semi-tight
Fireplaces	0

	Heating	Cooling
Area (ft²)	1707	1707
Volume (ft³)	15360	15360
Air changes/hour	0.26	0.14
Equiv. AVF (cfm)	67	36

Latent Cooling Equipment Load Sizing

Structure	1618 Btuh
Ducts	993 Btuh
Central vent (90 cfm) Outside air	1551 Btuh
Equipment latent load	4162 Btuh
Equipment Total Load (Sen+Lat)	23291 Btuh
Req. total capacity at 0.70 SHR	2.3 ton

Heating Equipment Summary

Make	Smart Comfort
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	10.0 kW
Heating output	34121 Btuh
Temperature rise	35 °F
Actual air flow	947 cfm
Air flow factor	0.042 cfm/Btuh
Static pressure	0.30 in H2O
Space thermostat	

Cooling Equipment Summary

Make	Smart Comfort
Trade	15 SEER HIGH EER R SERIES R410...
Cond	R4A530GKB
Coil	FED003610+NADA43601CK
AHRI ref	0
Efficiency	12.2 EER, 14 SEER
Sensible cooling	19880 Btuh
Latent cooling	8520 Btuh
Total cooling	28400 Btuh
Actual air flow	947 cfm
Air flow factor	0.047 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.83

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

Manual S Compliance Report

Entire House

Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: CZ5~In Line Duct

Cooling Equipment

Design Conditions

Outdoor design DB:	85.9°F	Sensible gain:	21043	Btuh	Entering coil DB:	78.5°F
Outdoor design WB:	70.6°F	Latent gain:	4162	Btuh	Entering coil WB:	64.0°F
Indoor design DB:	75.0°F	Total gain:	25206	Btuh		
Indoor RH:	50%	Estimated airflow:	947	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split AC				
Manufacturer:	Smart Comfort		Model:	R4A530GKB+FED003610+NADA43601CK	
Actual airflow:	947	cfm			
Sensible capacity:	19880	Btuh	94% of load		
Latent capacity:	8520	Btuh	205% of load		
Total capacity:	28400	Btuh	113% of load	SHR:	70%

Heating Equipment

Design Conditions

Outdoor design DB:	19.0°F	Heat loss:	26962	Btuh	Entering coil DB:	63.0°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Elec strip					
Manufacturer:	Smart Comfort		Model:			
Actual airflow:	947	cfm				
Output capacity:	10.0	kW	127% of load		Temp. rise:	57 °F

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Meets all requirements of ACCA Manual S.

Duct System Summary

Entire House

Clayton Homes

Job: 5530-28W-4BR
Date: 06/16/22
By: GCK

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

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Project Information

For: CZ5~In Line Duct

	Heating	Cooling
External static pressure	0.30 in H2O	0.30 in H2O
Pressure losses	0 in H2O	0 in H2O
Available static pressure	0.30 in H2O	0.30 in H2O
Supply / return available pressure	0.222 / 0.078 in H2O	0.222 / 0.078 in H2O
Lowest friction rate	0.085 in/100ft	0.085 in/100ft
Actual air flow	947 cfm	947 cfm
Total effective length (TEL)	353 ft	

Supply Branch Detail Table

Name		Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
BR2	h	2752	117	116	0.170	7.0	0x0	VlFx	30.8	100.0	st5
BR3	c	3072	79	145	0.192	7.0	0x0	VlFx	15.8	100.0	st5
BR4	h	1650	70	60	0.125	6.0	0x0	VlFx	28.4	150.0	st3
BR4-A	h	1650	70	60	0.469	5.0	0x0	VlFx	12.3	35.0	st3
Bath2	c	549	25	26	0.540	5.0	0x0	VlFx	6.2	35.0	st3
DinRm/Kit	c	1069	47	50	0.582	5.0	0x0	VlFx	3.2	35.0	st1
DinRm/Kit-A	c	1069	47	50	0.474	5.0	0x0	VlFx	11.8	35.0	st1
DinRm/Kit-B	c	1069	47	50	0.402	5.0	0x0	VlFx	20.3	35.0	st1
LivRm	c	1569	72	74	0.198	6.0	0x0	VlFx	12.3	100.0	st5
LivRm-A	c	1569	72	74	0.177	6.0	0x0	VlFx	25.3	100.0	st4
M.Bath	h	2225	94	52	0.336	6.0	0x0	VlFx	31.2	35.0	st1
M.Clo	h	504	21	7	0.368	5.0	0x0	VlFx	25.3	35.0	st1
MBR	h	1644	70	58	0.085	6.0	0x0	VlFx	46.1	215.0	st4
MBR-A	h	1644	70	58	0.171	6.0	0x0	VlFx	29.8	100.0	st4
Util	c	1366	45	65	0.590	5.0	0x0	VlFx	2.7	35.0	st3

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st4	Peak AVF	211	191	0.085	435	5.2	5 x 14	ShtMetl	st2
st5	Peak AVF	268	335	0.170	689	5.2	5 x 14	ShtMetl	st2
st2	Peak AVF	479	526	0.085	669	12.0	0 x 0	VinlFlx	
st3	Peak AVF	211	211	0.125	434	5.0	5 x 14	ShtMetl	
st1	Peak AVF	257	210	0.336	529	4.1	5 x 14	ShtMetl	

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb2	0x 0	421	350	91.5	0.085	394	14.0	0x 0		VlFx	
rb1	0x 0	525	597	80.3	0.097	558	14.0	0x 0		VlFx	

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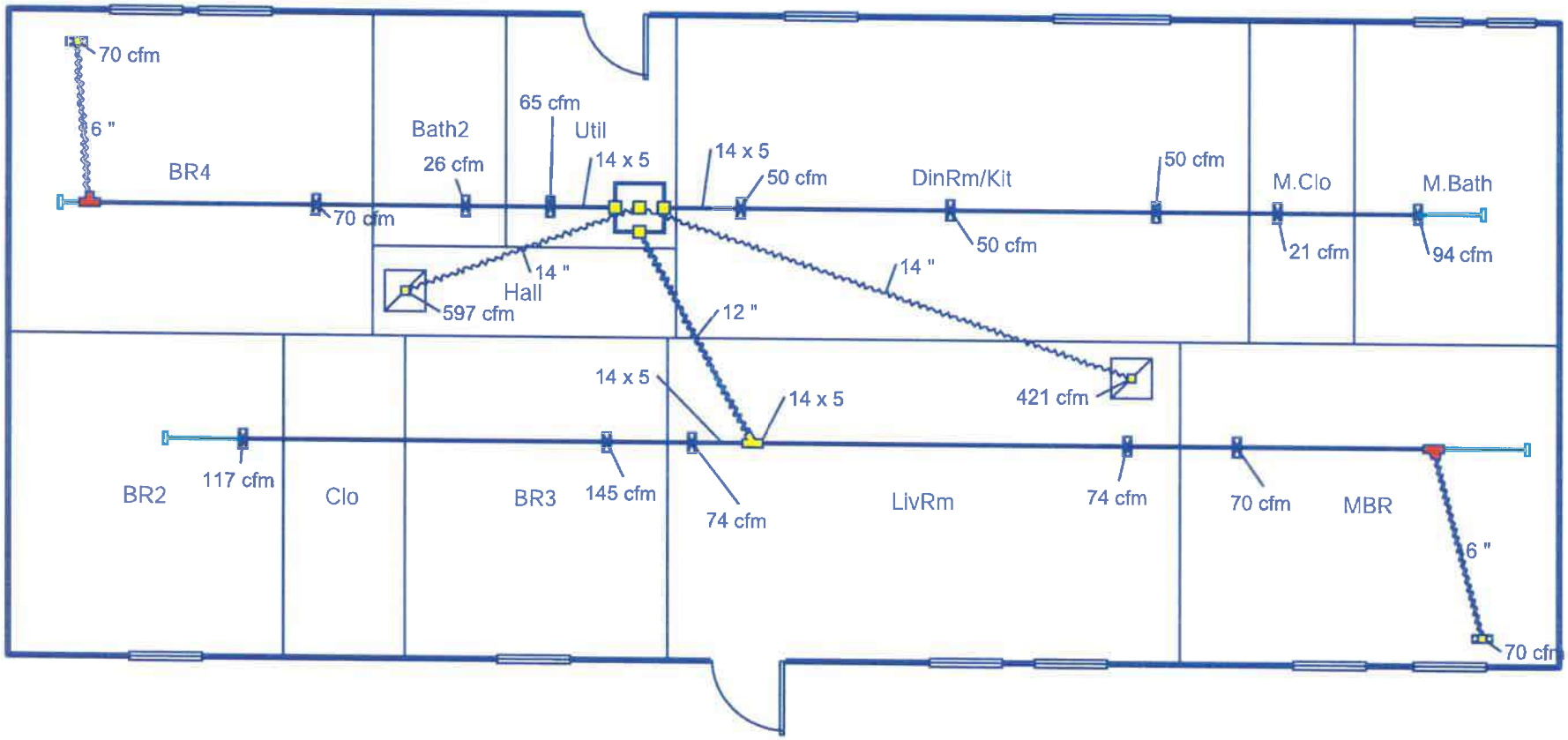
First Floor



Job #: 5530-28W-4BR
Performed by GCK for:
CZ5~In Line Duct

Clayton Homes
5000 Clayton Road
Maryville, TN 37804
Phone: 865-380-3000

Scale: 1 : 80
Page 1
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ELECTRICAL FEEDER CALCULATION

CMH
Manufacturing, Inc.
engineering department - modular

PAGE:	1 of 1
DATE:	16-Jun-22
BY:	GCK

MODEL NO. 5530-28W-4BR

Per NEC 220-30

1. LIGHTING LOAD:

1st floor			2nd floor		
length =	64.00	FT.	length =	0.00	FT.
width =	26.67	FT.	width =	0.00	FT.
Total area =	1706	SQ. FT.	Minimum number of 15 Amp circuits =	3	
X	3	VA			
TOTAL	5118	VA			

2. SMALL APPLIANCE LOAD:

Number of circuits	3	
X	1500	VA
TOTAL	4500	VA

3. LAUNDRY LOAD:

Number of circuits	1	
X	1500	VA
TOTAL	1500	VA

4. APPLIANCE LOAD:

Electric Range =	12100	VA
Electric Water Heater =	5000	VA
Electric Clothes Dryer =	5600	VA
Cooktop =	0	VA
Wall Oven =	0	VA
Freezer =	1200	VA
Dishwasher & Disposal =	2376	VA
Gas furnace motor =	0	VA
Micro-wave oven	1200	VA

5. TOTAL OF OTHER LOADS (1, 2 & 3)

	LEG A	
Lighting load =	5118	
Small appliance load =	4500	
Laundry =	1500	
Appliance load =	27476	
Sub-Total =	38594	
10000 VA @ 100% =	10000	
Remainder @ 40% =	11438	
Total =	21438	VA
	89.32	AMPS

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6. HVAC LOAD:

Lineal feet of baseboard heaters =			0	
Number of baseboard heater circuits =			0	
Total baseboard heater load =			0.0	Amps
Use 65% w/ less than 4 or 40% w/ 4 or more circuits (*)				
Electric furnace @ 65% (*)				
Circuit 1 =	60	Amps	39.00	Amps
Circuit 2 =	0	Amps	0.00	Amps
Air conditioner (*)				Amps
Total HVAC load (*- Use largest of these only) =			39.00	Amps

FURN SIZE
10KW

7. TOTAL OF ALL LOADS = 128.32 Amps

DOOR AND WINDOW SCHEDULE

NOTE: FLOOR PLAN WINDOW SIZES WITH AN "SG" DESIGNATION REPRESENTS SAFETY GLAZING REQUIRED PER IRC SECTION R308.4

SIZES	ROUGH OPENING	LIGHT (@ 5%)	VENT (@ 4%)
14 X 40 W/DW.	14 1/4" X 40 1/4"	2.50	1.30
24 X35 W/DW.	24 1/4" X 35 1/4"	4.10	2.10
24 X54 W/DW.	24 1/4" X 54 1/4"	6.80	3.50
30 X 60 W/DW.	30 1/4" X 60 1/4"	9.90	5.20
36 X 35 W/DW.	36 1/4" X 35 1/4"	6.60	3.30
36 X 54 W/DW.	36 1/4" X 54 1/4"	10.80	5.60
36 X 60 W/DW.	36 1/4" X 60 1/4"	12.20	6.20
36 X 72 W/DW.	36 1/4" X 72 1/4"	14.90	7.70
36 X 08 W/DW.	36 1/4" X 08 1/4"	0.50	0.00
36 x 12 W/DW.	36 1/4" X 12 1/4"	1.10	0.00
64 x 35 W/DW.	64 1/4" X 35 1/4"	11.50	2.60
58 x 35 W/DW.	58 1/4" X 35 1/4"	10.10	2.20
36 X 48 W/DW.	36 1/4" X 38 1/4"	9.25	4.70
30 X 72 W/DW.	30 1/4" X 72 1/4"	12.10	6.20
40 x 60 W/DW.	40 1/4" X 60 1/4"	13.70	7.00
DOORS			
2-8 X 6-8 DOOR	35 1/2" X 80"	-	-
3-0 X 6-8 DOOR	36" X 80"	-	-
PATIO DOOR	72" X 80"	33.6	16.8
ATRIUM DOOR	76 3/8" X 82 1/2"	21.15	17.3

FASTENING REQUIREMENTS: FOR DOORS AND WINDOWS, USE EITHER # 8 X 1" SCREWS, 7/16" X 1 1/2" X 16 GA. STAPLES, OR .092 X 2 1/4" PD NAILS, AT 12" ON CENTER MAXIMUM.

DESIGN CRITERIA

- FLOOR LIVE LOAD = 40 PSF
- GROUND SNOW LOAD = 30PSF
- ATTIC LIVE LOAD = 10 PSF
- SEISMIC DESIGN CATEGORY "C"
- WIND EXPOSURE - 'C'

DESIGN WIND SPEED = 90 MPH 100MPH 120MPH

ULITMATE WIND SPEED = 117 MPH 130 MPH 152 MPH

CLASSIFICATION:

- USE GROUP = R3
- CONSTRUCTION TYPE IS V-B (UNPROTECTED)
- SOIL PROFILE CATEGORY "D"
- Mean Roof Height - 22'-0" max.

ATTENTION LOCAL INSPECTION DEPARTMENT

SET-UP INSTRUCTIONS FOR THIS MODULAR UNIT ARE INCLUDED BY ATTACHMENT TO THESE PLANS. ANY PLAN SET WHICH DOES NOT INCLUDE AN ATTACHMENT ENTITLED "SET UP MANUAL" IS INCOMPLETE

SET- UP INSTRUCTIONS

SEE SETUP MANUAL SENT WITH HOME.

REQUIREMENTS FOR FIRESTOPPING

INSTALLATION OF NON- COMBUSTIBLE MATERIALS AROUND ALL OPENINGS THAT ARE VERTICAL PENETRATIONS IN THE FLR. AND CLG.

ATTENTION LOCAL INSPECTION DEPARTMENT

THE FOLLOWING ITEMS LISTED HAVE NOT BEEN COMPLETED BY *CMH MFG, Inc.,* HAVE NOT BEEN INSPECTED BY NTA, INC AND ARE NOT CERTIFIED BY THE STATE OF NORTH CAROLINA MODULAR LABEL. CODE COMPLIANCES MUST BE DETERMINED BY THE LOCAL JURISDICTION FOR THE FOLLOWING:

- HVAC SYSTEM (SITE INSTALLATION AND CONNECTIONS)
- THIS UNIT MUST BE CONNECTED TO A PUBLIC WATER SUPPLY AND SEWER SYSTEM, IF THESE ARE AVAILABLE.

CODE COMPLIANCE

ALL PLANS MEET OR EXCEED THE FOLLOWING:

North Carolina State Building Code Compliance:

- NC Residential Code - 2018 Edition
- NC Electrical Code - 2017

APPROVED BY NTA 6/17/2022

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David Richter

RIDGE BEAMS-SIZES AND MAX. SPAN CHART

RIDGE BM. CHART-SEE MATING WALL PG. RC-60.0 FOR MAX.

CALCULATIONS-SEE MATING WALL PGS. CRC SECTION

Soffitt materials for this unit assume that the building face will be 10 feet or greater from the property line when installed on site. Where the building face is less than 10 feet from the property line, underlayment materials and ventilation in accordance with Section R302.1.1,NC Residential Code, must be provided and installed at the site and inspected by the local jurisdiction

THERMAL ZONE REQUIREMENT

-INSULATION DONE PER THE NORTH CAROLINA 2018 PRESCRITIVE METHOD

CZ3: R-VALUES ARE CEILING-38, WALL-15, FLOOR-22
CZ4: R-VALUES ARE CEILING-38, WALL-15, FLOOR-22
CZ5 : R-VALUES ARE CEILING-38, WALL-19, FLOOR-30
U = 0.35 / SHGC = 0.28

MAX BTU PER ATTACHED HVAC CALCS

INSULATION PACKAGES

PER ATTACHED

MODULAR MANUAL REFERENCES

ITEMS BELOW ARE REFERENCED FOR NON PRESCRIPTIVE USE

FLOOR: ON FRAME CONSTRUCTION

DETAILS - SECTIONS ON FLOORS FOR ON FRAME: FL-500
CALCULATIONS - SEE CFL SECTION

FLOOR: OFF FRAME CONSTRUCTION

DETAILS - SECTIONS ON FLOORS FOR OFF FRAME: FL - 100

MARRIAGE WALLS - 2x CONSTRUCTION

DETAILS - MW-20.0, MW-30.0, MW-40.0
CALCULATIONS - SEE CMW SECTION

PLUMBING FIXTURES

SEE PAGE PLN - 1.8

ELECTRICAL APPLIANCES AND LOADS

ELECTRICAL - SEE PAGES PLN-1.0 for WH & PLN-1.5 for FURN
CALCULATION - SEE TECHNICAL SHEET ATTACHED FOR MODEL SPECIFIC ELECTRICAL PANEL LOAD CALC FOR 200 AMP SERVICE

ANCHORAGE REQUIREMENTS

FOUNDATION SECTIONS FOR PERIMETER ON FRAME:
PER SETUP MANUAL

ANCHORAGE REQUIREMENTS

FOUNDATION SECTIONS FOR PERIMETER OFF FRAME:
PER SETUP MANUAL

TRUSSES - DETAILS / CALCULATIONS

PER TRUSS PRINTS

ALL MODELS ARE AVAILABLE WITH FLOOR PLAN REVERSED FROM LEFT TO RIGHT AND / OR FRONT TO BACK.

MARRIAGE WALL COLUMNS SPAN CHART

DETAIL - SEE MATING WALL COLUMNS (PAGE MW-20.0)
CALCULATIONS - SEE CMW SECTION

INSTRUCTIONS ON FILLING OUT PLAN SET BEFORE CONSTRUCTION

YOU MUST CHECK THE APPROPREATE BOX OF WHAT THE STRUCTURE IS TO BE BUILT TO BEFORE PRODUCTION BEGINS. THE MARK SET MUST ACCOMPANY THE UNIT THROUGH THE PRODUCTION PROCESS.

EXTERIOR SIDEWALL HEADERS - SIZES AND MAXIMUM SPAN CHART

HEADER CHART - SEE EXTERIOR WALL PAGE EW - 20.0
CALCULATIONS - CEW SECTION

ATTENTION LOCAL INSPECTION DEPARTMENT:

IF THIS STRUCTURE IS IN A THERMAL ZONE MORE STRINGENT THAN THAT LISTED ON THESE PLANS, IS SET ON PILINGS, OR IS INSTALLED AT A MOUNTAIN REGION OR COASTAL HIGH HAZARD SITE SUCH THAT WIND OR OTHER DESIGN PARAMETERS ARE INCREASED, THE DESIGN MUST BE DETERMINED TO BE ADEQUATE FOR ACTUAL SITE CONDITIONS. ALTERATIONS MAY BE REQUIRED TO BRING THE HOME INTO COMPLIANCE WITH THE MORE STRINGENT CONDITIONS.

"Service entrance conductors routed from their point of entrance into the structure, to their point of attachment to the service enclosure a distance horiontally not more than twice the nominal width of the service enclosure and vertically not more than the greater of 5 feet or twice the nominal height of the sevice enclosure shall be considered to be in compliance with the requirements of 230-70(a) of the current National Electrical Code. Service entrance conductors may be routed in the most direct route or at right angles. Service entrance conductors in excess of these specified limits will not be allowed unless specifically authorized by special permission from the electrical inspector having jurisdiction to accommodate adverse site conditions which would not reasonably allow installation within this criteria."

This home is NOT designed for placement in Coastal High Hazard Areas or Ocean Hazard Areas.

CMH Manufacturing, Inc.

REVISIONS	BY	DATE	ALL MODULAR MODELS
			COVER SHEET 1-0

NC.

TYPICAL FASTENING SCHEDULE:

FLOOR FASTENING	REFERENCE 'CFL' – FLOOR CONSTRUCTION CALCULATIONS OF THE MANUAL.
RIM JOIST TO JOIST	PER FL-110 OR FL-510.0 IN APPROVED MANUAL
FLOOR BLOCKING TO JOIST	PER FL-100.0 IN APPROVED MANUAL
MULTIPLE JOIST	.131 x 3" NAILS @ 10" O.C., W/ GLUE 80%
DECKING TO FLOOR FRAMING	PER FL-10 IN APPROVED MANUAL
EXTERIOR WALL FASTENING	REFERENCE 'CEW' – EXTERIOR WALL CONSTRUCTION CALCULATIONS OF THE MANUAL
LOWER TOP PLATE & BOTTOM PLATE TO STUD	PER EW-25 IN APPROVED MANUAL DOUBLE STUDS 7/16" x 2-1/2" x 15 GA. STAPLES @ 6" O.C.
DOUBLE TOP PLATES	PER EW-1 IN APPROVED MANUAL
HEADER TO STUDS	PER EW-20 CHARTS IN APPROVED MANUAL
HEADER COMPONENTS	PER EW-20 IN APPROVED MANUAL
STUDS TO SILLS	PER EW-20 IN APPROVED MANUAL
EXTERIOR SIDING	PER THE MANUFACTURER'S SPECIFICATIONS
BOTTOM PLATE TO FLOOR	PER EW-31 IN APPROVED MANUAL
SIDEWALL TO ENDWALL	PER EW-30 FOR NON-SHEARWALL OR PER SW-40 FOR SHEARWALL OR PER EW-0.0 IN APPROVED MANUAL
WALL WALL TO WALL TOP PLATES	3" x 6" x .036" (20 GA.) GALVANIZED STEEL PLATE W/ (6) .131 x 3" NAILS AT EACH SIDE AT EACH
EXTERIOR WALL SHEATHING	FOR APA RATED SHEATHING; 7/16" X 1-3/4" x 15 GA. STAPLES AT 6" O.C. AT ALL EDGES & 12" O.C. FIELD. FOR COMPOSITE WALLS, FASTEN PER EW-40. FOR SHEARWALL FASTEN PER SW-40 OR ATTACHED PAGES (IF ATTACHED). ALL OTHER SHEATHING FASTENED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
MATING WALL FASTENING	REFERENCE 'CMW' – MARRIAGE WALL CALCULATIONS OF THE MANUAL
LOWER TOP PLATE TO STUD	PER MW-40 IN APPROVED MANUAL
BOTTOM PLATE TO STUD	PER MW-40 IN APPROVED MANUAL
MULTIPLE STUDS	7/16" x 2-1/2" x 15 GA. STAPLES OR .131 x 3" NAILS @ 16" O.C. TO EACH MEMBER
STANDARD COLUMN	PER MW-20 IN APPROVED MANUAL
DOUBLE TOP PLATES	PER MW-40 IN APPROVED MANUAL
BOTTOM PLATE TO FLOOR	PER MW-31 IN APPROVED MANUAL
MATING WALL TO ENDWALL	PER EW-30 IN APPROVED MANUAL
WALL TO WALL TOP PLATES	3" x 6" x .036" (20 GA.) GALVANIZED STEEL PLATE W/ (6) .131 x 3" NAILS AT EACH SIDE AT EACH WALL OR OVERLAPPED PLATE PER EW-0.
INTERIOR WALL FASTENING	
BOTTOM PLATE TO STUDS	PER PT-40 IN APPROVED MANUAL
TOP PLATE TO STUD	PER PT-40 IN APPROVED MANUAL
DOUBLE STUDS	7/16" x 2-1/2" x 16 GA. STAPLES @ 16" O.C.
FLAT HEADER TO STUDS	PER PT-20 IN APPROVED MANUAL
WALL TO FLOOR	PER PT-40 IN APPROVED MANUAL
WALL TO WALL	PER PT-30 IN APPROVED MANUAL
TOP PLATE TO ROOF SYSTEM	PER PT-40 IN APPROVED MANUAL
GYPSUM TO WALL FRAMING	PER THE RESIDENTIAL BUILDING CODE TABLES
ROOF FASTENING	REFERENCE 'CRC' – ROOF CONSTRUCTION CALCULATIONS OF THE MANUAL
CEILING BOARD TO TRUSS	FOAM-SEAL 2100 SPRAY ADHESIVE PER THE MANUFACTURER'S SPECIFICATIONS
BLOCKING TO TRUSS	(2) 7/16" x 2-1/2" x 15 GA. STAPLES DIRECT
TRUSS TO SIDEWALL TOP PLATE	PER RC-30 IN APPROVED MANUAL
TRUSS TO RIDGE BEAM	PER RC-65 IN APPROVED MANUAL
TRUSS TO EDGE RAIL	PER MW-31 CHARTS IN APPROVED MANUAL
EDGE RAIL TO MATING WALL	PER MW-31 CHARTS IN APPROVED MANUAL
TRUSS TO ENDWALL TOP PLATE ROOF DECKING TO TRUSS	PER SW-40 IN APPROVED MANUAL FOR SHEARWALLS AND RC-33.0 FOR NON-SHEARWALLS PER SW20.0 THRU SW-389E.2 (IF NOT ATTACHED) IN APPROVED MANUAL
SHINGLE TO ROOF DECKING	PER THE MANUFACTURER'S OR ARMA SPECIFICATIONS
OUTLOOKER TO TRUSS	PER RC-70 IN APPROVED MANUAL
INSTALLATION FASTENING	REFERENCE INSTALLATION PAGES PROVIDED IN EACH APPROVAL.

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David Richter

(CS1) 7/16" APA RATED ROOF DECKING 24/16 SPAN RATING.

(CS2) 15# MIN. ROOF UNDERLAYMENT; SINGLE LAYER w/ GREATER THAN 4:12 ROOF PITCH; DOUBLE LAYER w/ 4:12 OR LESS

(CS3) MIN. 20 YEAR SHINGLES.

(CS4) 1 1/2" WIDE ENGINEERED WOOD BEAM, EACH HALF IN OPEN SPAN AREAS GREATER THAN 48".

(CS5) ENGINEERED WOOD TRUSSES: COMPONENTS & SPACING PER TRUSS PRINT

* FOR CONNECTION AND SET-UP OF ROOF: SEE MODULAR SET-UP PAGES ATTACHED TO APPROVAL

(CS6) CEILING INSULATION, BLOWN OR BATT.

(CS7) CONTINUOUS VENTED SOFFIT.

(CS8) DOUBLE 2x4 TOP PLATE (MIN.).

(CS9) 2x4 STUDS @ 16" O.C. STUD GRADE SPF (MIN.).

(CS10) WALL INSULATION (BATT)

(CS11) 3/8" OSB SHEATHING WITH WATER RESISTIVE BARRIER BELOW ALL EXT. FINISH MATERIAL. CORROSION-RESISTANT FLASHING REQUIRED AT ALL LOCATIONS AS SHOWN ON APPROVED MANUAL DETAILS

(CS12) SINGLE 2x4 BOTTOM PLATE SPF #3 (MIN.).

(CS13) 3/8" (MIN.) GYPSUM WALL BOARD.

(CS14) FLOOR INSULATION (BATT.)

(CS15) MIN. 19/32" RATED DECKING 16" O.C. OR 32/16 SPAN RATING.

(CS16a)

Duct Insulation:
1 – Min R-8
2 – A VAPOR RETARDER HAVING A MAXIMUM 0.05 PERM IN ACCPRDANCE WITH ASTM E96, OR ALUMINUM FOIL WITH A MINIMUM THICHNESS OF 2 MILLS, SHALL BE INSTRALLED ON THE EXTERIOR OF THE INSULATION ON THE COOLING SUPPLY DUCT THAT PASS THROUGH UNCONDITIONED SPACE CONDUCIVE TO CONDENSATION EXCEPT WHERE THE INSULATION IS SPRAY POLYURETHANCE FOAM WITH A MAXIMUM WATER VAPOR PERMEANCE OF 3 PERM PER INCH AT THE INSTALLED THICKNESS.

(CS16) MAIN HEAT DUCT. (MAY BE SITE INSTALLED BY OTHERS)

(CS17) OFF FRAME PER FL-110.0

(CS18) OFF FRAME PER FL-110.0

(CS19) **2x4** (MIN.) MARRIAGE WALL STUDS @ 16" O.C.

(CS20) LISTED BOTTOM BOARD, WHERE OCCURS.

(CS21) 1/2" SHIM FOR COMPRESSION STRIP.

(CS22) DOUBLE **2x4** (MIN.) TOP PLATE.

(CS23) **2x4** (MIN.) BOTTOM PLATE.

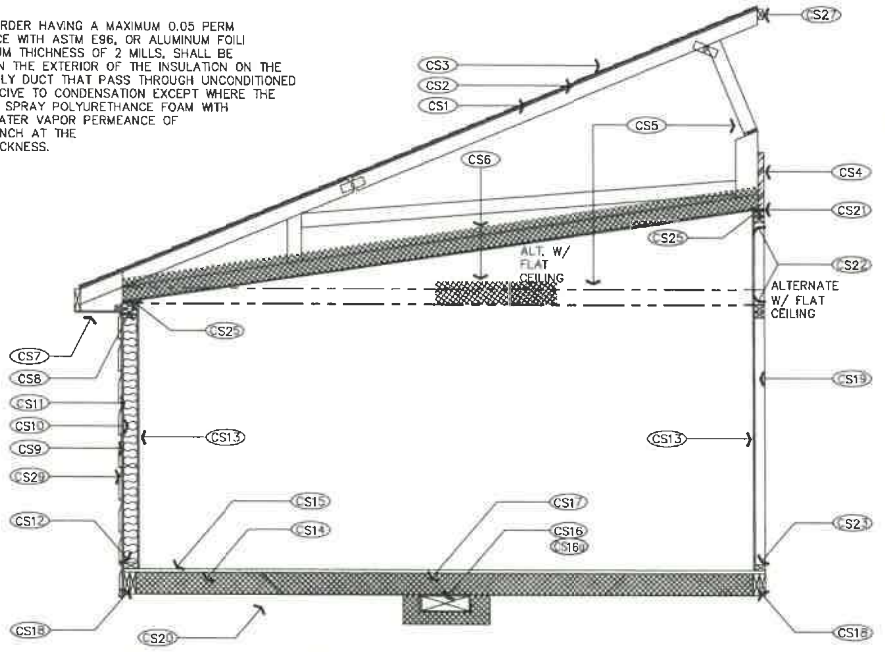
(CS24) 1/2" (MIN.) GYPSUM BOARD CEILING.

(CS25) WEDGE SUPPORT AT CATHEDRAL CEILING, EACH END OF TRUSS.

(CS27) CONTINUOUS 2x3 SPF #3 MINIMUM FOR TRUSS TOP RAIL FOR RIDGE CONNECTION

(CS28) 2x FULL DEPTH BLOCKING 24" O.C. (2) JOIST BAY MIN. ENDWALL LOCATION ONLY.

(CS29) LAP BOARD, WOOD OR VINYL SIDING, HARDI SIDING, OR EXPOSED SHEATHING FOR ON SITE EXTERIOR FINISH INSTALLATION.



CMH MANUFACTURING, INC

TYPICAL CROSS SECTION & FASTENING SCHEDULE

BRAND:		SERIES: NC/SC/DE MODULAR	MODEL NO.: ALL
PLANT: #958		DESCRIPTION: OFF FRAME HINGED ROOF	
DRAWN BY: DRR	DATE DRAWN: 10-21-15	DATE PRINTED: 4-25-17	SHEET: 1-0.2

TYPICAL FASTENING SCHEDULE:

FLOOR FASTENING	REFERENCE 'CFL' – FLOOR CONSTRUCTION CALCULATIONS OF THE MANUAL.
RIM JOIST TO JOIST	PER FL-110 OR FL-510.0 IN APPROVED MANUAL
FLOOR BLOCKING TO JOIST	PER FL-100.0 IN APPROVED MANUAL
MULTIPLE JOIST	.131 x 3" NAILS @ 10" O.C., W/ GLUE 80%
DECKING TO FLOOR FRAMING	PER FL-10 IN APPROVED MANUAL
EXTERIOR WALL FASTENING	REFERENCE 'CEW' – EXTERIOR WALL CONSTRUCTION CALCULATIONS OF THE MANUAL
LOWER TOP PLATE & BOTTOM PLATE TO STUD	PER EW-25 IN APPROVED MANUAL. DOUBLE STUDS 7/16" x 2-1/2" x 15 GA. STAPLES @ 6" O.C.
DOUBLE TOP PLATES	PER EW-1 IN APPROVED MANUAL
HEADER TO STUDS	PER EW-20 CHARTS IN APPROVED MANUAL
HEADER COMPONENTS	PER EW-20 IN APPROVED MANUAL
STUDS TO SILLS	PER EW-20 IN APPROVED MANUAL
EXTERIOR SIDING	PER THE MANUFACTURER'S SPECIFICATIONS
BOTTOM PLATE TO FLOOR	PER EW-31 IN APPROVED MANUAL
SIDEWALL TO ENDWALL	PER EW-30 FOR NON-SHEARWALL OR PER SW-40 FOR SHEARWALL OR PER EW-0.0 IN APPROVED MANUAL
WALL WALL TO WALL TOP PLATES	3" x 6" x .036" (20 GA.) GALVANIZED STEEL PLATE W/ (6) .131 x 3" NAILS AT EACH SIDE AT EACH
EXTERIOR WALL SHEATHING	FOR APA RATED SHEATHING; 7/16" X 1-3/4" x 15 GA. STAPLES AT 6" O.C. AT ALL EDGES & 12" O.C. FIELD. FOR COMPOSITE WALLS, FASTEN PER EW-40. FOR SHEARWALL FASTEN PER SW-40 OR ATTACHED PAGES (IF ATTACHED). ALL OTHER SHEATHING FASTENED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
MATING WALL FASTENING	REFERENCE 'CMW' – MARRIAGE WALL CALCULATIONS OF THE MANUAL
LOWER TOP PLATE TO STUD	PER MW-40 IN APPROVED MANUAL
BOTTOM PLATE TO STUD	PER MW-40 IN APPROVED MANUAL
MULTIPLE STUDS	7/16" x 2-1/2" x 15 GA. STAPLES OR .131 x 3" NAILS @ 16" O.C. TO EACH MEMBER
STANDARD COLUMN	PER MW-20 IN APPROVED MANUAL
DOUBLE TOP PLATES	PER MW-40 IN APPROVED MANUAL
BOTTOM PLATE TO FLOOR	PER MW-31 IN APPROVED MANUAL
MATING WALL TO ENDWALL	PER EW-30 IN APPROVED MANUAL
WALL TO WALL TOP PLATES	3" x 6" x .036" (20 GA.) GALVANIZED STEEL PLATE W/ (6) .131 x 3" NAILS AT EACH SIDE AT EACH WALL OR OVERLAPPED PLATE PER EW-0.
INTERIOR WALL FASTENING	
BOTTOM PLATE TO STUDS	PER PT-40 IN APPROVED MANUAL
TOP PLATE TO STUD	PER PT-40 IN APPROVED MANUAL
DOUBLE STUDS	7/16" x 2-1/2" x 15 GA. STAPLES @ 16" O.C.
FLAT HEADER TO STUDS	PER PT-20 IN APPROVED MANUAL
WALL TO FLOOR	PER PT-40 IN APPROVED MANUAL
WALL TO WALL	PER PT-30 IN APPROVED MANUAL
TOP PLATE TO ROOF SYSTEM	PER PT-40 IN APPROVED MANUAL
GYPSUM TO WALL FRAMING	PER THE RESIDENTIAL BUILDING CODE TABLES
ROOF FASTENING	REFERENCE 'CRC' – ROOF CONSTRUCTION CALCULATIONS OF THE MANUAL
CEILING BOARD TO TRUSS	FOAM-SEAL 2100 SPRAY ADHESIVE PER THE MANUFACTURER'S SPECIFICATIONS
BLOCKING TO TRUSS	(2) 7/16" x 2-1/2" x 15 GA. STAPLES DIRECT
TRUSS TO SIDEWALL TOP PLATE	PER RC-30 IN APPROVED MANUAL
TRUSS TO RIDGE BEAM	PER RC-65 IN APPROVED MANUAL
TRUSS TO EDGE RAIL	PER MW-31 CHARTS IN APPROVED MANUAL
EDGE RAIL TO MATING WALL	PER MW-31 CHARTS IN APPROVED MANUAL
TRUSS TO ENDWALL TOP PLATE ROOF DECKING TO TRUSS	PER SW-40 IN APPROVED MANUAL FOR SHEARWALLS AND RC-33.0 FOR NON-SHEARWALLS PER SW20.0 THRU SW-389E.2 (IF NOT ATTACHED) IN APPROVED MANUAL
SHINGLE TO ROOF DECKING	PER THE MANUFACTURER'S OR ARMA SPECIFICATIONS
OUTLOOKER TO TRUSS	PER RC-70 IN APPROVED MANUAL
INSTALLATION FASTENING	REFERENCE INSTALLATION PAGES PROVIDED IN EACH APPROVAL.

APPROVED BY NTA 6/17/2022

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David Richter

(CS1) 7/16" APA RATED ROOF DECKING 24/16 SPAN RATING.

(CS2) 15# MIN. ROOF UNDERLAYMENT; SINGLE LAYER w/ GREATER THAN 4:12 ROOF PITCH; DOUBLE LAYER w/ 4:12 OR LESS

(CS3) MIN. 20 YEAR SHINGLES.

(CS4) 1 1/2" WIDE ENGINEERED WOOD BEAM, EACH HALF IN OPEN SPAN AREAS GREATER THAN 48".

(CS5) ENGINEERED WOOD TRUSSES: COMPONENTS & SPACING PER TRUSS PRINT
- FOR CONNECTION AND SET-UP OF ROOF; SEE MODULAR SET-UP PAGES ATTACHED TO APPROVAL.

(CS6) CEILING INSULATION, BLOWN OR BATT

(CS7) CONTINUOUS VENTED SOFFIT.

(CS8) DOUBLE 2x4 TOP PLATE (MIN.).

(CS9) 2x4 STUDS @ 16" O.C. STUD GRADE SPF (MIN.).

(CS10) WALL INSULATION (BATT)

(CS11) 3/8" OSB SHEATHING WITH WATER RESISTIVE BARRIER BELOW ALL EXT. FINISH MATERIAL. CORROSION-RESISTANT FLASHING REQUIRED AT ALL LOCATIONS AS SHOWN ON APPROVED MANUAL DETAILS

(CS12) SINGLE 2x4 BOTTOM PLATE SPF #3 (MIN.).

(CS13) 3/8" (MIN.) GYPSUM WALL BOARD.

(CS14) FLOOR INSULATION (BATT, OR BLANKET)

(CS15) MIN. 19/32" RATED DECKING 16" O.C. OR 32/16 SPAN RATING.

(CS16)

Duct Insulation:
1 – Min R-8
2 – A VAPOR RETARDER HAVING A MAXIMUM 0.05 PERM IN ACCORDANCE WITH ASTM E96, OR ALUMINUM FOIL WITH A MINIMUM THICKNESS OF 2 MILLS, SHALL BE INSTRALLED ON THE EXTERIOR OF THE INSULATION ON THE COOLING SUPPLY DUCT THAT PASS THROUGH UNCONDITIONED SPACE CONDUCIVE TO CONDENSATION EXCEPT WHERE THE INSULATION IS SPRAY POLYURETHANCE FOAM WITH A MAXIMUM WATER VAPOR PERMEANCE OF 3 PERM PER INCH AT THE INSTALLED THICKNESS.

(CS16) MAIN HEAT DUCT. (MAY BE SITE INSTALLED BY OTHERS)

(CS17) ON-FRAME PER FL-510 IN APPROVED MANUAL

(CS18) ON-FRAME PER FL-510 IN APPROVED MANUAL

(CS19) 2x3 (MIN.) MARRIAGE WALL STUDS @ 16" O.C.

(CS20) LISTED BOTTOM BOARD, WHERE OCCURS.

(CS21) 1/2" SHIM FOR COMPRESSION STRIP.

(CS22) DOUBLE 2x3 (MIN.) TOP PLATE.

(CS23) 2x3 (MIN.) BOTTOM PLATE.

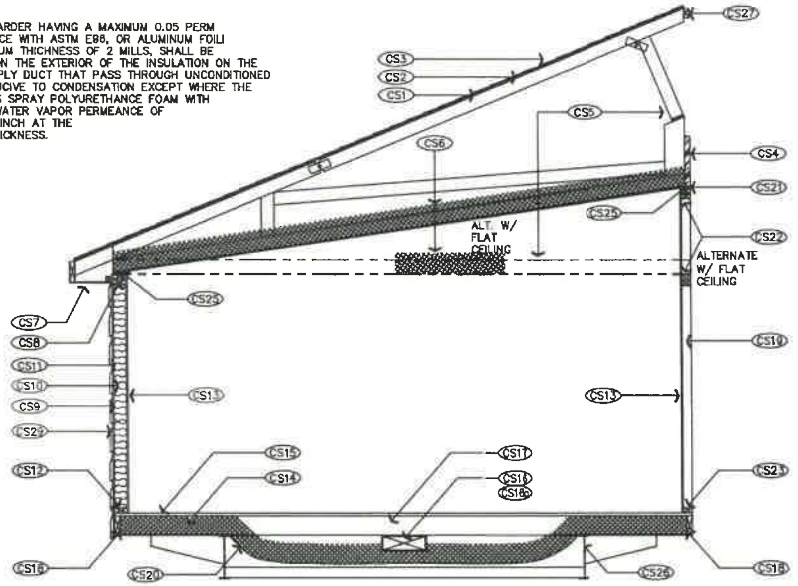
(CS24) 1/2" (MIN.) GYPSUM BOARD CEILING.

(CS25) WEDGE SUPPORT AT CATHEDRAL CEILING, EACH END OF TRUSS.

(CS26) PER FL-510 IN APPROVED MANUAL

(CS27) CONTINUOUS 2x3 SPF #3 MINIMUM FOR TRUSS TOP RAIL FOR RIDGE CONNECTION

(CS28) LAP BOARD, WOOD OR VINYL SIDING, HARDI SIDING, OR EXPOSED SHEATHING FOR ON SITE EXTERIOR FINISH INSTALLATION.



CMH MANUFACTURING, INC

TYPICAL CROSS SECTION & FASTENING SCHEDULE

BRAND:	SERIES: NC/SC/DE MODULAR	MODEL NO.: ALL
PLANT: #958	DESCRIPTION: ON FRAME HINGED ROOF	
DRAWN BY: DRR	DATE DRAWN: 10-21-15	DATE PRINTED: 1-10-19
SHEET: 1-0.2		

APPROVED BY NTA 6/17/2022

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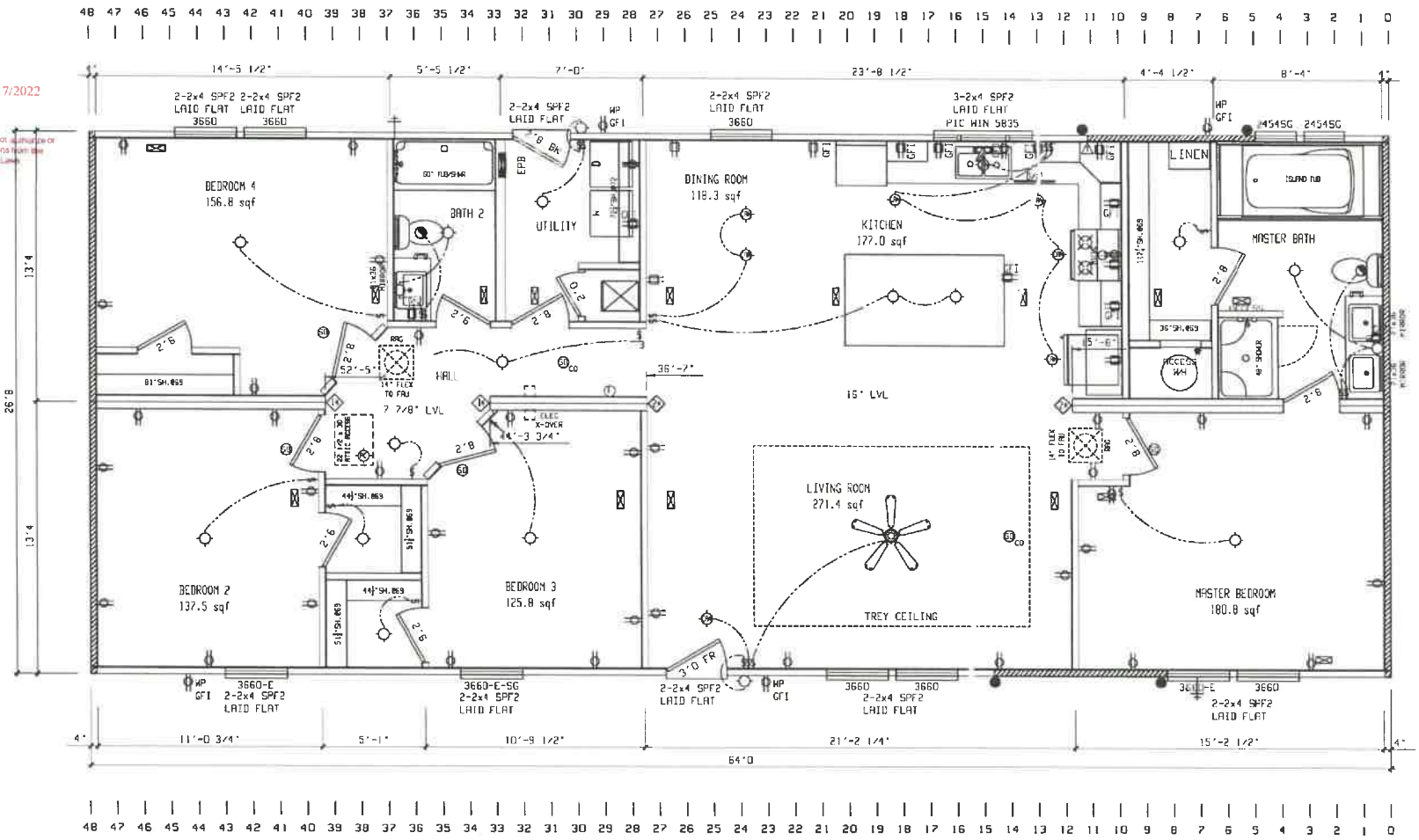


251"EW/ 94"SW
195PLF EFFECTIVE LENGHTS
BASED ON SW-31.10._.1a.C.17._.78.1-2
ENGINEERED METHOD.
UNBLOCKED DIAPHRAGM SW-20-237B.1
90 MPH WIND SPEED

250"EW/ 94"SW
241PLF EFFECTIVE LENGHTS
BASED ON SW-31.10._.1a.E.17._.78.1-2
ENGINEERED METHOD.
UNBLOCKED DIAPHRAGM SW-20-237B.1
100 MPH WIND SPEED

272"EW/ 102"SW
366PLF EFFECTIVE LENGHTS
BASED ON SW-31.10._.1a.I.17._.78.1-2
ENGINEERED METHOD.
UNBLOCKED DIAPHRAGM SW-20-389B.1
120 MPH WIND SPEED

INSULATION DONE PER THE NORTH CAROLINA 2018 PRESCRIPTIVE METHOD
CZ3: R=38 CEILING R=15 WALLS R=22 FLOOR
CZ4: R=38 CEILING R=15 WALLS R=22 FLOOR
CZ5: R=38 CEILING R=19 WALLS R=30 FLOOR
U = 0.35 / SHGC = 0.28

RIDGE BEAM PER: RC-60.3.R.G.M._.20
COLUMNS PER: MW-20.3.R.G.M.46.20
SIDEWALL HEADERS PER:
EW-20.3.R.G.C.22.20 (90MPH)
EW-20.3.R.G.E.22.20 (100MPH)
EW-20.3.R.G.I.22.20 (120MPH)

RETURN AIR REQUIREMENTS
1. 20"x16" GRILL REQUIRED
2. 4"x10" GRILL W/ 2 1/2" DOOR UNDERCUT
3. DOOR(S) MUST BE UNDERCUT 2 1/2" MIN.
4. 4"x24" OR 6"x14" GRILL REQUIRED

● INDICATES FREE END SHEAR WALL WITH BLOCKING
#1 THE # SPECIFIES THAT THERE CAN BE NO HOLES IN STUDS IN COLUMNS

BRAND	SERIES
SCHULT	CL28

CLAYTON HOME BUILDING GROUP

REVISIONS	BY	DATE

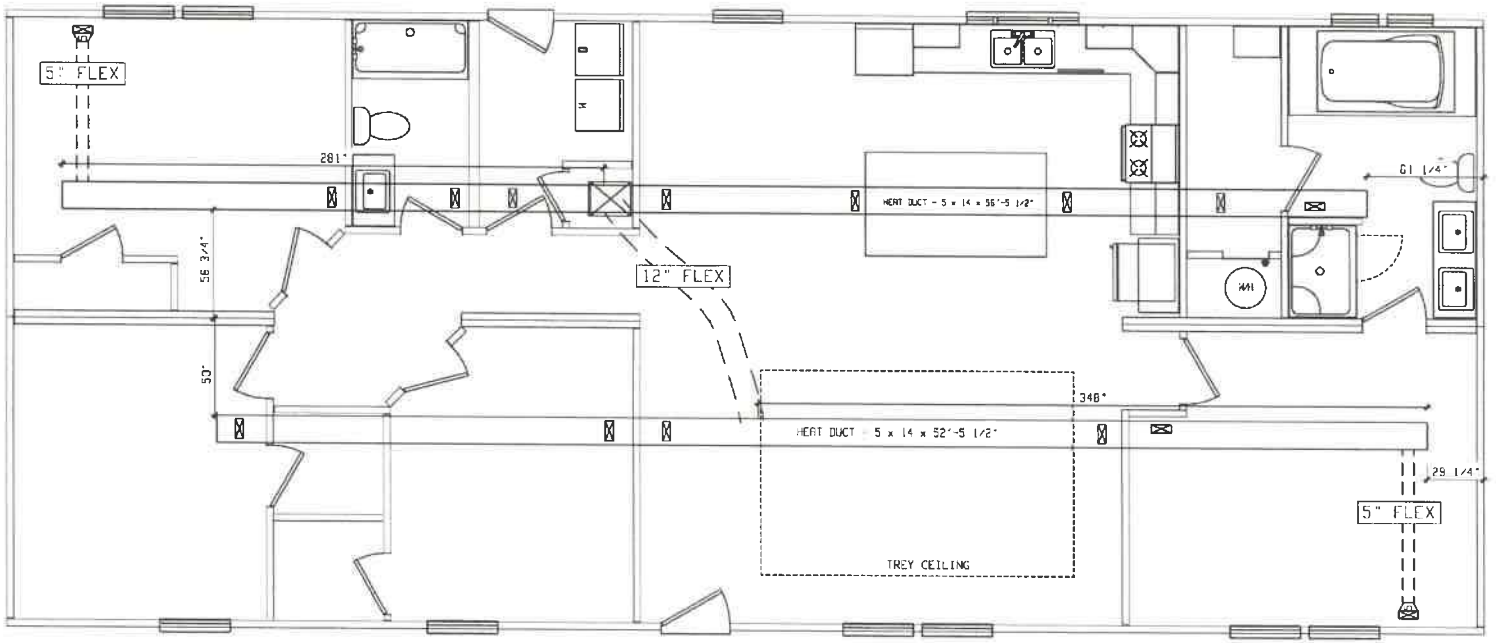
GENERAL NOTES
CEILING HEIGHT = 108.0

DRAWING TITLE
MASTER PLAN

MODEL NAME	SQ. FT.
5530-28W-G-4BR	1706

PLANT	DESCRIPTION	MODEL NO.
958	28X64 4BR-2BA	5530-28W-G-4BR

DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GCK	06/16/2022	06/16/2022	1-1



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6/17/2022
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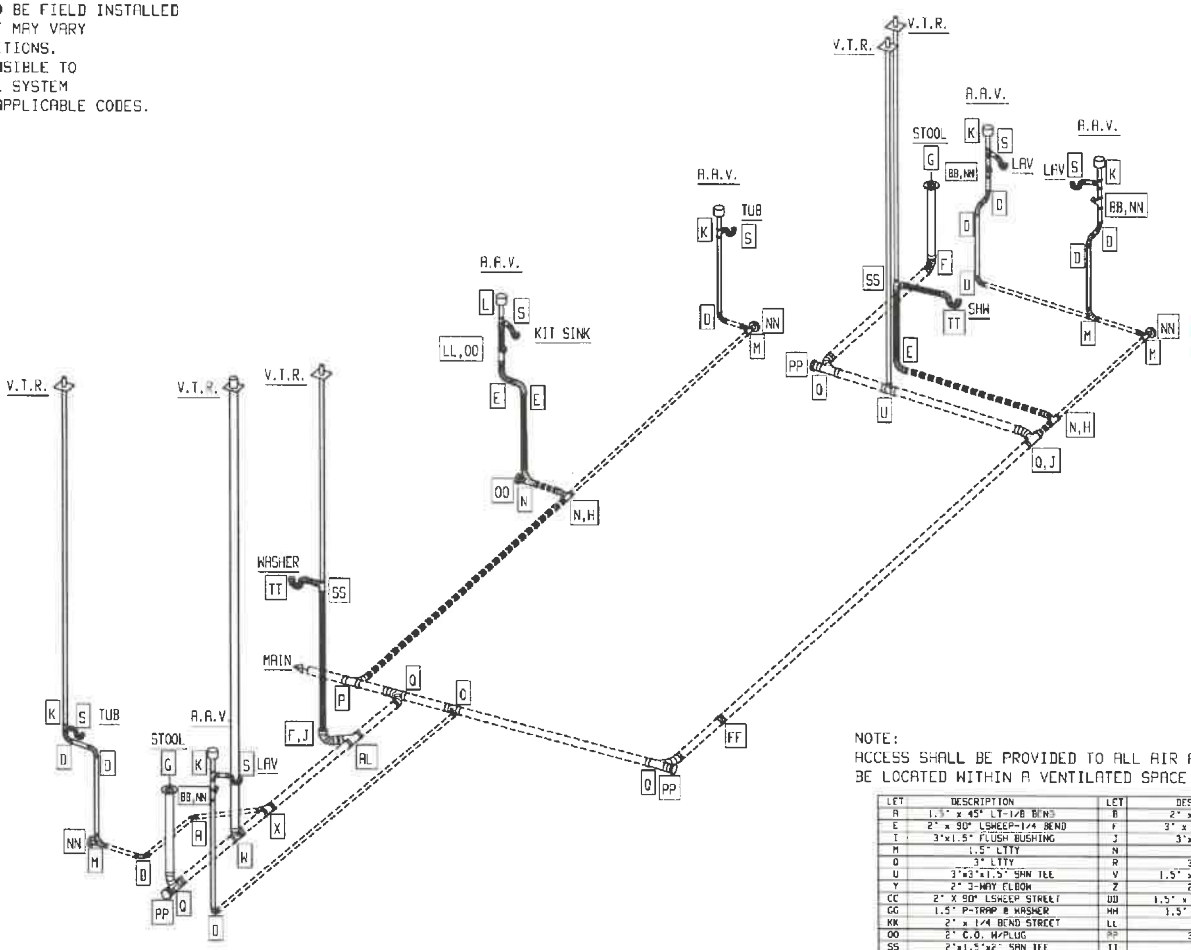
BRAND: SCHULT	SERIES: CL28	REVISIONS	BY	DATE	GENERAL NOTES	DRAWING TITLE: INLINE HVAC-A	MODEL NAME: 5530-28W-G-4BR / SQ. FT.: 1706
CLAYTON HOME BUILDING GROUP							PLANT: 958 / DESCRIPTION: 28X64 4BR-2BA / MODEL NO.: 5530-28W-G-4BR
							DRAWN BY: GCK / ORIG. DATE: 06/16/2022 / DATE PRINTED: 06/16/2022 / SHEET NO.: 4-1A

NOTE
DASHED LINES REPRESENT BELOW FLOOR DWV PIPE TO BE FIELD INSTALLED BY OTHERS. LAYOUT MAY VARY DUE TO SITE CONDITIONS. BUILDER IS RESPONSIBLE TO ASSURE THAT FINAL SYSTEM CONFORMS TO ALL APPLICABLE CODES.

PIPING AND FITTING MATERIAL TYPE TO BE:
ABS (ACRYLONITRILE-BUTADIENE-STYRENE)
OR PVC (POLYVINYL CHLORIDE)

PIPE LEGEND

1 1/2"	
2"	
3"	



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STANDARD SHIP LOOSE	
A	1
AL	1
D	3
E	1
F	1
F, J	1
FF	1
M	4
N	1
N, H	2
NN	3
O	1
OO	1
P	1
PP	3
Q	4
Q, J	1
U	1
W	1
X	1
1.5" PIPE	45 FT
2" PIPE	20 FT
3" PIPE	65 FT

NOTE:
ACCESS SHALL BE PROVIDED TO ALL AIR ADMITTANCE VALVES. THE VALVE SHALL BE LOCATED WITHIN A VENTILATED SPACE THAT ALLOWS AIR TO ENTER THE VALVE

LET	DESCRIPTION	LET	DESCRIPTION	LET	DESCRIPTION	LET	DESCRIPTION
A	1.5" x 45° LT-1/8 BEND	B	2" x 45° LT-1/8 BEND	C	3" x 45° LT-1/8 BEND	D	1.5" x 90° LONG SWEEP-1/4 BEND
E	2" x 90° LSWEEP-1/4 BEND	F	3" x 90° LSWEEP-1/4 BEND	G	4"x3" CLOSET FLANGE	H	2"x1.5" FLUSH BUSHING
I	3"x1.5" FLUSH BUSHING	J	3"x2" FLUSH BUSHING	K	1.5" SANITARY TEE	L	2"x1.5"x1.5" SAN TEE
M	1.5" LTTY	N	2" LTTY	O	3"x3"x1.5" LTTY	P	3"x3"x2" LTTY
Q	3" LTTY	R	3" 3-WAY ELBOW	S	1.5"x1.5" P-TRAP	T	3"x3"x1.5"x1.5" DBL SAN TEE
U	3"x3"x1.5" SAN TEE	V	1.5" x 90° LONG SWEEP STREET	W	3" SANITARY TEE	X	3"x3"x1.5" WYE
Y	2" 3-WAY ELBOW	Z	2"x2"x1.5" LTTY	AA	3"x3"x2" SAN TEE	BB	1.5" x 45° WYE
CC	2" X 90° LSWEEP STREET	DD	1.5" x 45° 1/8 BEND STREET	EE	1.5" COUPLING	FF	3" COUPLING
GG	1.5" P-TRAP W WASHER	HH	1.5" SAN TEE STREET	II	2"x1.5"x1.5" LTTY	JJ	2"x1.5"x2" LTTY
KK	2" x 1/4 BEND STREET	LL	2" x 45° WYE	MM	3" DBL SAN TEE	NN	1.5" C.O. W/PLUG
OO	2" C.O. W/PLUG	PP	3" C.O. W/PLUG	QQ	2"x2"x1.5" WYE REDUCING	RR	1.5" 1/4 BEND
SS	2"x1.5"x2" SAN TEE	TT	2" P-TRAP	UU	2" x 45° 1/8 BEND STREET	VV	2" COUPLING
WW	3" x 45° 1/8 BEND STREET	XX	2" SANITARY TEE	YY	4" CLOSET FLANGE	ZZ	4" COUPLING
AB	1.5" CONT WASTE	AC	1.5" x 22 1/2° ELBOW STREET	AD	2" x 22 1/2° ELBOW STREET	AE	3"x1.5"x2" DBL SAN TEE
AF	2"x1.5"x1.5" SAN TEE STREET	AG	2"x1.5"x1.5" 3-WAY ELBOW	AH	3" x 22 1/2" 1/16 BEND ELBOW	AI	1.5" 3-WAY ELBOW
AJ	2" x 22 1/2" 1/16 BEND ELBOW	AK	4"x3" CLOSET BEND STR (CUT DOWN 1.5")	AL	3"x3"x3" WYE	AM	3" 1/4 BEND
AN	2"x3" PIPE INCREASER	AO	3" x 3" x 2" WYE	AP	2" 1/4 BEND	AQ	2"x2"x2"x2" DBL SAN TEE
AR	1.5"x2" PIPE INCREASER	AS	1.5"x1.5"x1.5"x1.5" DBL SAN TEE	AT	3" DOUBLE FIXTURE TEE	AU	3"x3"x1.5"x1.5" DBL SAN TEE
AV	3"x3"x2"x2" SAN TEE (SI) LEFT	AW	3"x3"x3"x1.5" SAN TEE (SI) LEFT	AX	3"x3"x3"x2" SAN TEE (SI) LEFT	AY	3"x3"x2"x2" SAN TEE (SI) RIGHT
AZ	3"x3"x3"x1.5" SAN TEE (SI) RIGHT	BA	3"x3"x3"x2" SAN TEE (SI) RIGHT	BC	3"x3"x3"x2"x2" SAN TEE DBL(SI)	BD	3"x3"x3"x1.5"x1.5" SAN T DBL(SI)
BE	1.5"x2" PIPE INCREASER	BF	3"x3"x1.5" 90° LSWEEP LOW HEEL INLET	BG	3"x3"x2" 90° LSWEEP LOW HEEL INLET	BH	1.5" x 22 1/2" 1/16 BEND ELBOW
BI	4"x3" CLOSET BEND STREET	BJ		BK		BL	

BRAND: SCHULT
SERIES: CL28

CLAYTON HOME BUILDING GROUP

REVISIONS

BY	DATE

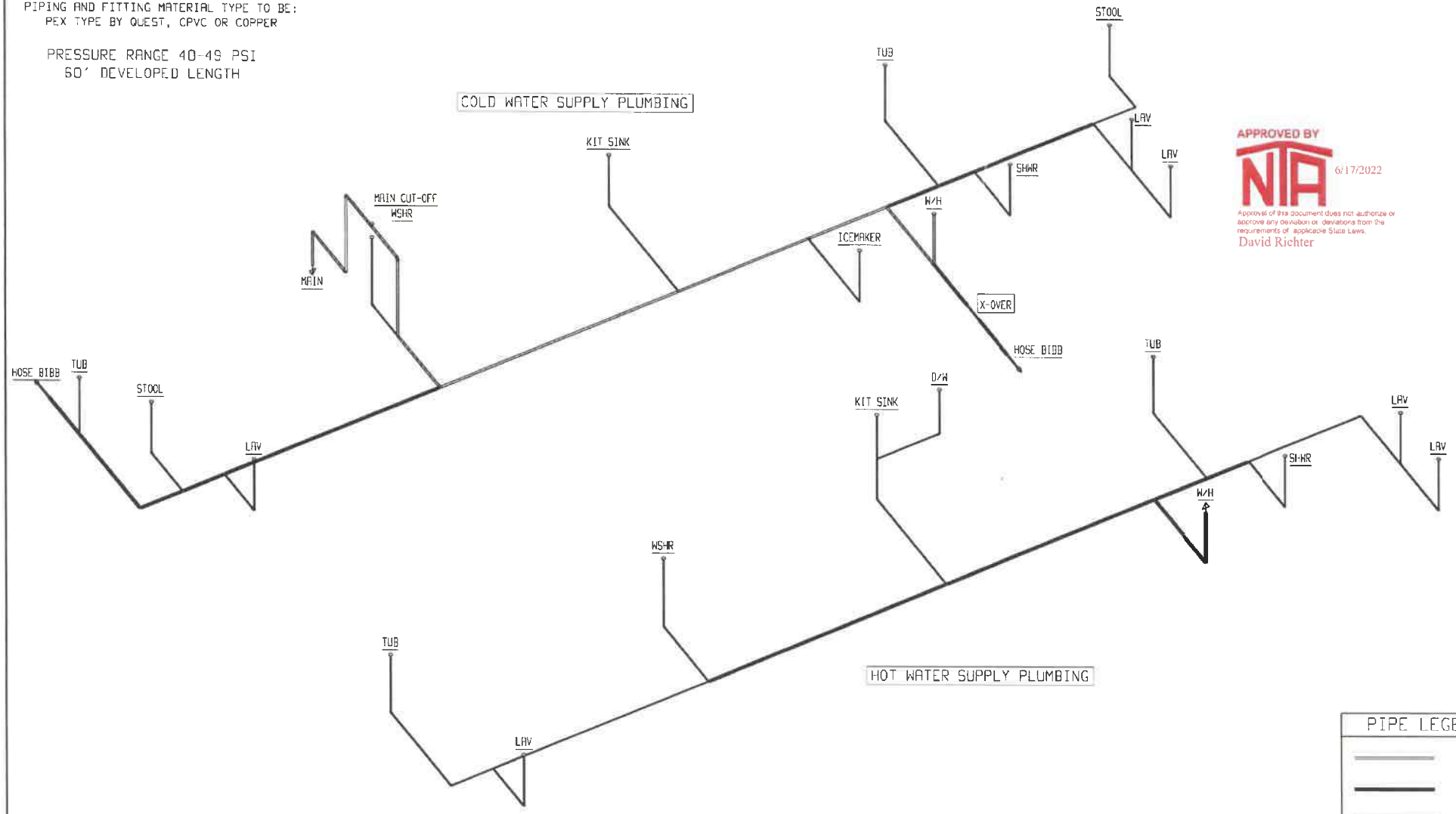
GENERAL NOTES

DRAWING TITLE
DWV SCHEMATIC

MODEL NAME		SQ. FT.
5530-28W-G-4BR		1706
PLANT	DESCRIPTION	MODEL NO.
958	28X64 4BR-2BA	5530-28W-G-4BR
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GCK	06/16/2022	06/16/2022	8-1

PIPING AND FITTING MATERIAL TYPE TO BE:
PEX TYPE BY QUEST, CPVC OR COPPER

PRESSURE RANGE 40-49 PSI
60' DEVELOPED LENGTH



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PIPE LEGEND	
	1"
	3/4"
	1/2"

BRAND	SERIES
SCHULT	CL28

CLAYTON HOME BUILDING GROUP

REVISIONS	BY	DATE

GENERAL NOTES
HOSE BIBBS PER SPECS

DRAWING TITLE
SUPPLY PLUMBING

MODEL NAME	SQ. FT.
5530-28W-G-4BR	1706

PLANT	DESCRIPTION	MODEL NO.
958	28X64 4BR-2BA	5530-28W-G-4BR

DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GCK	06/16/2022	06/16/2022	9-1

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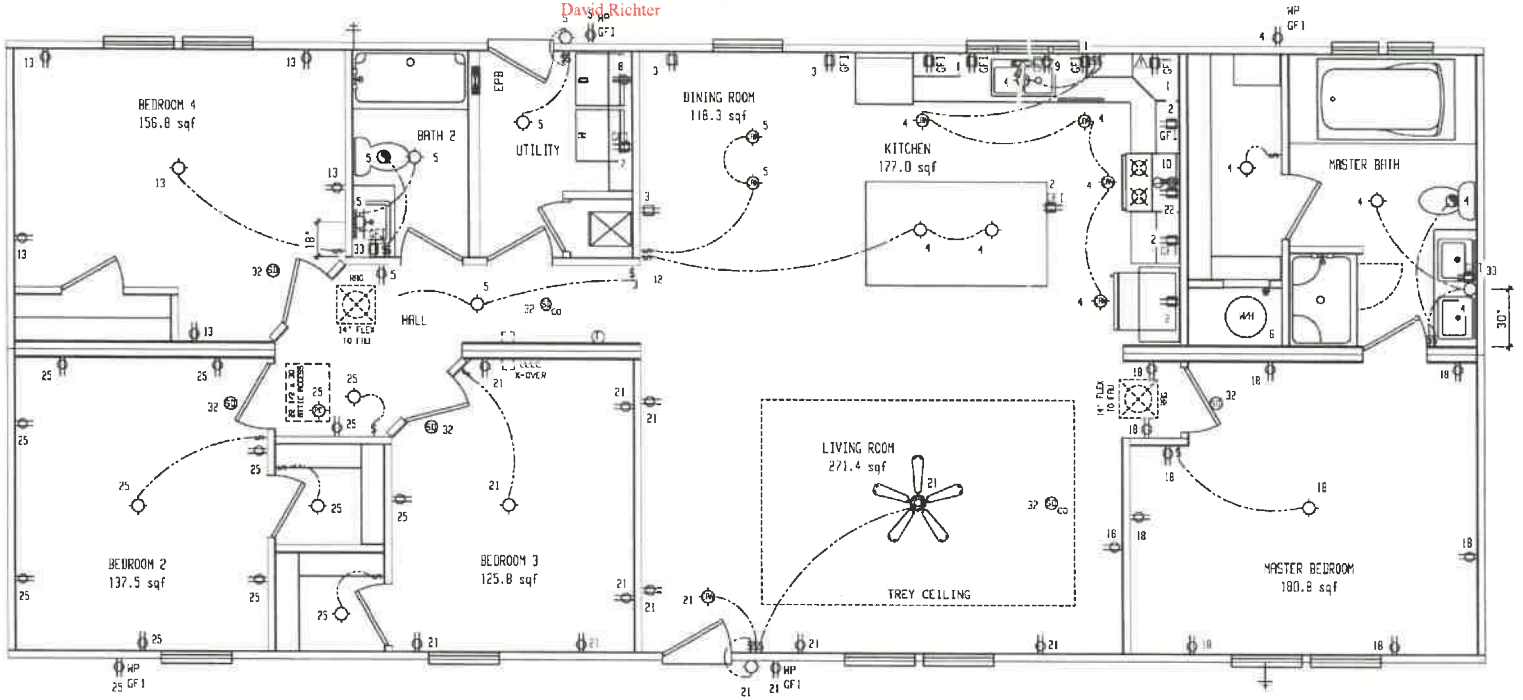


NOTE: ALL FAMILY, DINING, LIVING, KITCHEN, LAUNDRY,LIBRARIES, DENS, BEDROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS OR SIMILAR ROOMS OR SPACES SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER IN ACCORDANCE WITH SECTION 210.12 OF THE NEC.

ELECTRICAL SCHEDULE

CIR. NO.	DESCRIPTION	AMP. RESP.	VOLTS	COPPER WIRE
1	PORTABLE APPLIANCES	20	120	12
2	PORTABLE APPLIANCES	20	120	12
3	PORTABLE APPLIANCES	20	120	12
4	GEN. LIGHTING/RECEPT.	15	120	14
5	GEN. LIGHTING/RECEPT.	15	120	14
6	ELEC. WATER HEATER	CIRCUITS VARY, SEE		
DRPTA PAGE PLM-3.1 FOR MOD, PLM-1.1 FOR MOD				
7	WASHER RECEPT.	20	120	12
8	DRYER RECEPT.	30	240	10
9	OPT. DISHWASHER	15	120	14
10	ELECT. RANGE/CKTOP	40	240	8
11	GAS FURNACE	15	120	14
12	ELECTRIC FURNACE	CIRCUITS VARY, SEE		
DRPTA PAGE PLM-3.5 FOR MOD, PLM-1.5 FOR MOD				
13	GEN. LIGHTING/RECEPT.	15	120	14
14	OPT. COOLER BOX	15	120	14
15	OPT. GARBAGE DISPOSAL	15	120	14
16	FREEZER	20	120	12
17	OPT. WHIRLPOOL	20	120	12
18	GEN. LIGHTING/RECEPT.	15	120	14
19	GEN. LIGHTING/RECEPT.	15	120	14
20	GEN. LIGHTING/RECEPT.	15	120	14
21	GEN. LIGHTING/RECEPT.	15	120	14
22	OPT. MICROWAVE	20	120	12-2
24	ELECT. BUILT-IN OVEN	20	240	12-2
25	GEN. LIGHTING/RECEPT.	15	120	14
26	GEN. LIGHTING/RECEPT.	15	120	14
27	GEN. LIGHTING/RECEPT.	15	120	14
28	GEN. LIGHTING/RECEPT.	15	120	14
29	GEN. LIGHTING/RECEPT.	15	120	14
30	GEN. LIGHTING/RECEPT.	15	120	14
31	SITE INSTALLED HEAT PUMP	40	240	8/3
32	SHORE POWER	15	120	14
33	WASH GFI (MOD ONLY)	20	120	12
34	GEN. LIGHTING/RECEPT.	20	120	12

BRAND	SERIES
SCHULT	CL28

CLAYTON HOME BUILDING GROUP

REVISIONS	BY	DATE

GENERAL NOTES

LOCK-OUT BREAKER ON CIRCUIT #6

DRAWING TITLE

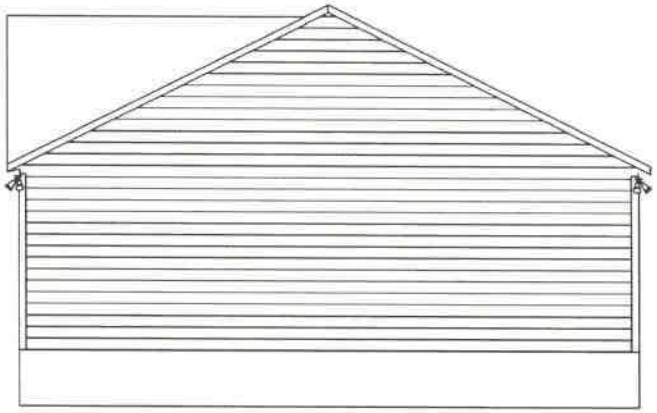
ELECTRICAL PLAN

MODEL NAME	SQ. FT.
5530-28W-G-4BR	1706

PLANT	DESCRIPTION	MODEL NO.
958	28X64 4BR-2BA	5530-28W-G-4BR

DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GCK	06/16/2022	06/16/2022	11-1

FRONT ELEVATION



RIGHT SIDE ELEVATION

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BRAND	SERIES
SCHULT	CL28

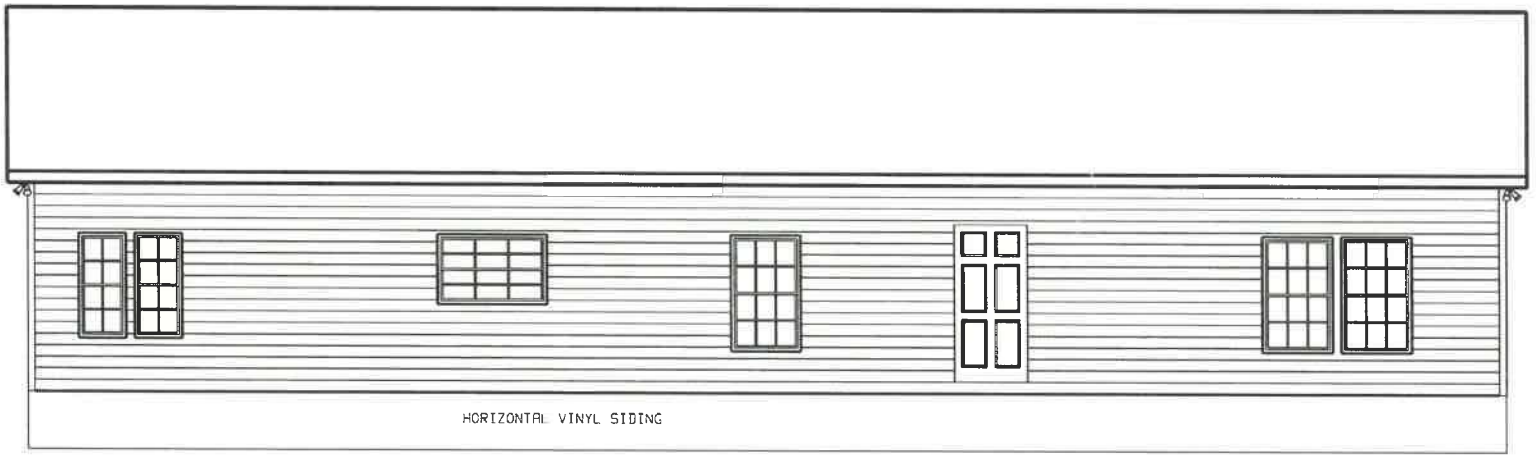
CLAYTON HOME BUILDING GROUP

REVISIONS	BY	DATE

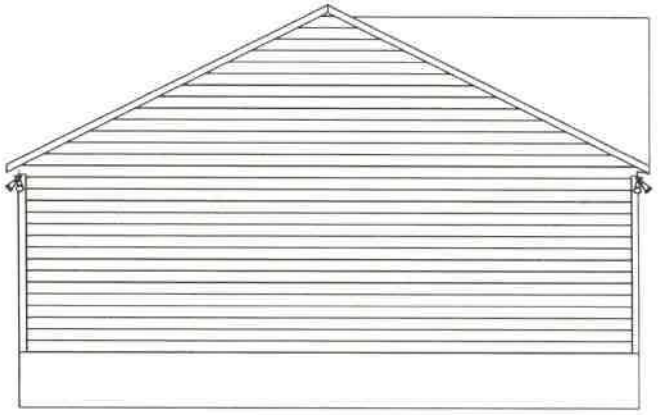
GENERAL NOTES

DRAWING TITLE
EXTERIOR ELEVATION
FRONT & RIGHT SIDE

MODEL NAME			SQ. FT.
5530-28W-G-4BR			1706
PLANT	DESCRIPTION		MODEL NO.
958	28X64 4BR-2BA		5530-28W-G-4BR
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GCK	06/16/2022	06/16/2022	20-1



BACK ELEVATION



LEFT SIDE ELEVATION

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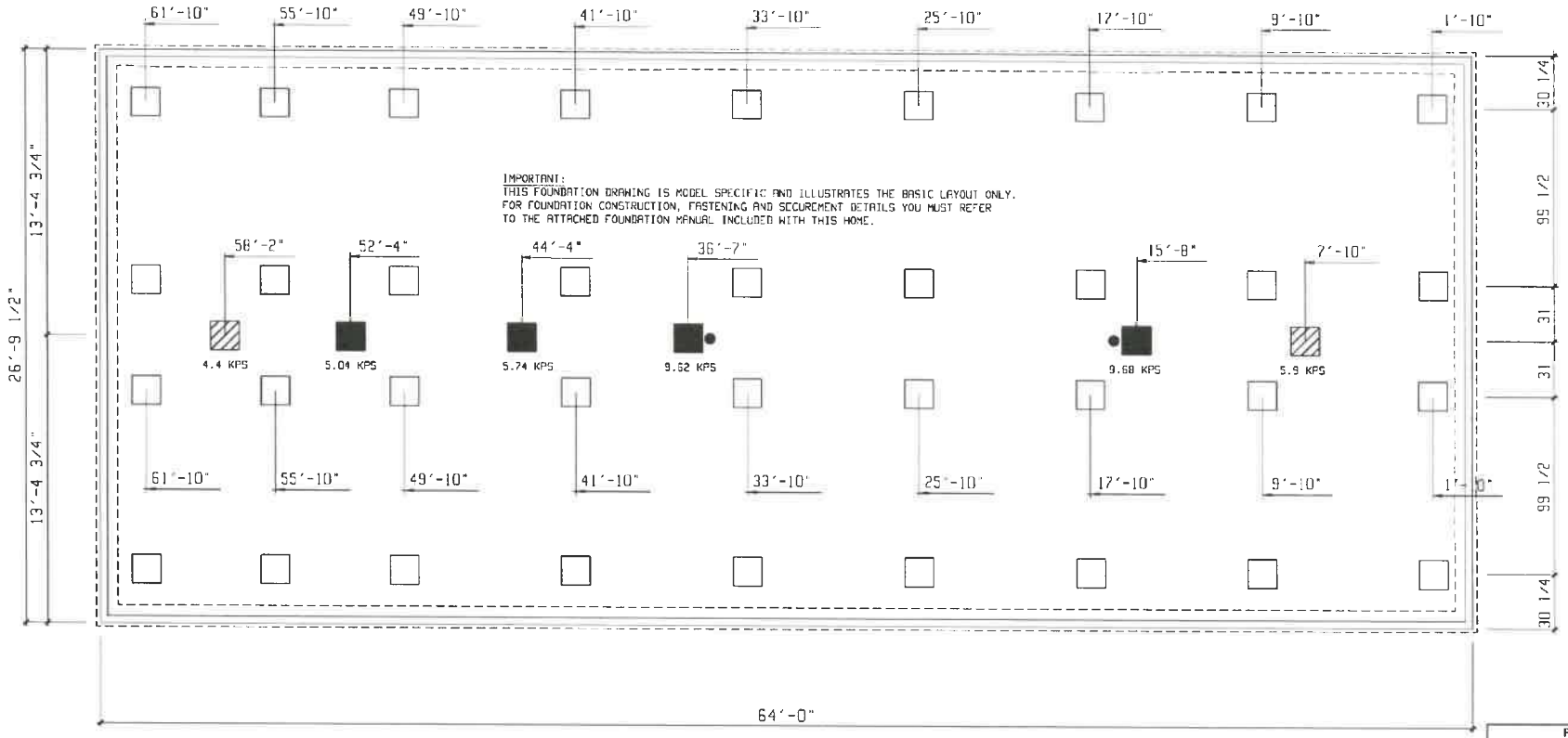
ELEVL1

BRAND: SCHULT	SERIES: CL28	REVISIONS	BY	DATE	GENERAL NOTES	DRAWING TITLE: EXTERIOR ELEVATION BACK & LEFT SIDE	MODEL NAME: 5530-28W-G-4BR	SQ. FT.: 1706
CLAYTON HOME BUILDING GROUP							PLANT: 958 / DESCRIPTION: 28X64 4BR-2BA / MODEL NO.: 5530-28W-G-4BR
							DRAWN BY: GCK / ORIG. DATE: 06/16/2022 / DATE PRINTED: 06/16/2022 / SHEET NO.: 20-2



NOTES MARRIAGE WALL TIE DOWNS
PER TABLE M AND DETAIL D6 IN THE FOUNDATION PACKAGE

NOTE: THE OVERALL FOUNDATION WIDTH SHOWN
IS 1 1/2" LARGER THAN THE ACTUAL FLOOR WIDTH
TO COMPENSATE FOR PRODUCTION AND ASSEMBLY TOLERANCES.

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PIER LEGEND
- SUPPORT AT MATING COLUMN
- SUPPORT UNDER MATING WALL
- SUPPORT UNDER MATING OPENING
- SUPPORT AT PORCH/RECESSED ENTRY
- SUPPORT UNDER MAIN I-BEAM
- SUPPORT UNDER PERIMETER WALL
- SUPPORT AT CROSS I-BEAM BASEMENT

CRAWLSPACE VENTILATION
VENTILATION IS BASED ON 144 SQ. IN. OF VENT FOR EVERY 150 SQ. FT. OF CRAWLSPACE AREA WITH APPROVED VAPOR RETARDER MATERIAL. ONE SUCH VENT MUST BE WITHIN 3 FT. OF EACH CORNER

1706 SQ. FT. OF CRAWLSPACE AREA
1638 SQ. IN. OF VENT REQUIRED
32 VENTS NEEDED @ 52 SQ. IN. EACH
1664 SQ. IN. VENTILATION INSTALLED MINIMUM

CRAWL SPACE
18" MIN CLEARANCE BELOW BOTTOM OF FLOOR JOIST. GROUND TO BE COVERED WITH APPROVED VAPOR RETARDER MATERIAL.

INSTALL SWITCHED LIGHT AND GFCI RECEPT AT CRAWL SPACE ENTRANCE FOR SERVICE OF MECHANICAL EQUIPMENT PER NEC - 210-70 (C)

N O T E : MASONRY UNITS FOR STAND ALONE PIERS SHALL BE LAID IN TYPE "M" OR "S" MORTAR OR SHALL BE COVERED WITH SURFACE BONDING CEMENT COMPLYING WITH ASTM C 887 WHEN ACCEPTABLE TO LOCAL BUILDING AUTHORITY. SURFACE BONDING CEMENT SHALL BE APPLIED IN STRICT COMPLIANCE OF MANUFACTURERS INSTRUCTIONS. BOTTOM COURSE SHALL BE LAID IN TYPES "M" OR "S" MORTAR OR BONDING MORTAR (CEMENT).

NOTE: THE FOUNDATION WIDTH SHOWN 26'-8" IS IDENTICAL TO THE OVERALL FLOOR WIDTH OF THE HOME. THE FOUNDATION MAY BE CONSTRUCTED UP TO 1 1/2" WIDER TO COMPENSATE FOR PRODUCTION AND ASSEMBLY TOLERANCES.

BRAND	SERIES
SCHULT	CL28

CLAYTON HOME BUILDING GROUP

REVISIONS	BY	DATE

GENERAL NOTES

SEE INSTALLATION MANUAL FOR FOUNDATION GENERAL NOTES & TIE-DOWN REQUIREMENTS

DRAWING TITLE

20/130 PSF PIER SET

MODEL NAME		SQ. FT.
5530-28W-G-4BR		1706
PLANT	DESCRIPTION	MODEL NO.
958	28X64 4BR-2BA	5530-28W-G-4BR
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GCK	06/16/2022	06/16/2022	21-PS

PRINT DATE: 04/12/2019

PIER SET (FRAME TIED) FOUNDATION DESIGN FOR:

26' - 8 " 2-SECTION MODULAR
1 STORY- W.O ATTIC

Attic without storage where the maximum clear height between joist and rafter is less than 42 inches or req'd insulation depth exceeds the depth of the bottom chord.

FRAME STRAPS & GROUND ANCHORS ARE REQUIRED TO BE USED FOR THIS SYSTEM.

SIDEWALLS & MATING WALL(S) ARE SUPPORTED (PERIMETER BLOCKED).

BUILDING CODE INFORMATION:

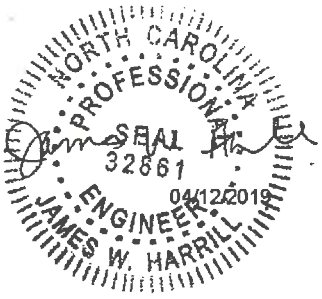
IRC (2015)
ASCE 7-10
2018 NORTH CAROLINA RESIDENTIAL CODE

BUILDING SITE INFORMATION:

*MAXIMUM ULTIMATE/DESIGN WIND SPEED & EXPOSURE: 130/ 100 MPH EXPOSURE C-enclosed
MINIMUM SOIL BEARING CAPACITY: 1500 PSF
MAXIMUM GROUND SNOW(S): 20 PSF, 30 PSF
Flat roof snow load (Pg)=20.0 PSF ,23.1 PSF
SEISMIC DESIGN CATEGORY: C
DESIGN SPECTRAL RESPONSE (S_{DS}): 0.49
SEISMIC SOIL SITE CLASS: D

HOME INFORMATION:

UNIT WIDTH: 26' - 8 "
MAX. UNIT LENGTH: 76 ft.
ROOF PITCH: 6/12 to 6/12
DESIGN LOADS: 40 PSF FL. LL., 7PSF T.C.D.L., 8PSF B.C. D.L., 8PSF FL. DL. &, 10PSF B.C.L.L
MAX. SIDEWALL HEIGHT: 108 INCHES
CHASSIS BEAM: 12"x10.8plf



ON FRAME FLOOR
PLANT NUMBER: 958

** Ultimate wind speed Vult. Per ASCE 7-10/ allowable stress design wind speed Vasd. All wind speeds are indicated as (Vasd) design speeds unless otherwise indicated.*

FILENAME:958N-14.R.F.E.22.22.210(4)

program version: 19.9

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Clayton home building group

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NORTH CAROLINA PROFESSIONAL SEAL 32661 ENGINEER JAMES W. HARRILL 04/12/2019

General Notes

1. Foundation plans and details developed by CMH Manufacturing, Inc. are provided to our company owned sales centers and wholesale distribution partners. Alternate foundation systems may be used in lieu of these plans provided they are designed by a local professional Engineer or Architect familiar with the local soil and climate conditions, and are approved by the local authority having jurisdiction.

2. All notes stating "in field" or "by owner" are obligations pertaining to owner/contractor.

3. Owner / Contractor shall remove all organic material including debris and vegetation from under home.

4. The area beneath and around home should be graded and sloped to prevent surface water from accumulating under the home.

5. Owner /Contractor shall provide complete foundation, vapor barrier, tie down anchor, and all finish work.

6. Owner/Contractor shall be responsible for performing all work in accordance with previously approved construction details and obtaining all necessary inspections as required by local or state authorities.

7. In areas likely to have collapsible, expansive, compressible, shifting or other unknown soil characteristics, the building official shall determine whether to require a soil test to determine the soil characteristics. This soil test shall be made by an approved testing agency using an approved method.

8. Pier spacing is dimensioned to centerline unless otherwise noted.

9. The foundation dimensions shown are nominal. An increase in module width should be expected due to module expansion, setting tolerances, etc... The foundation contractor should consult with the manufacturer of the modules prior to construction of the foundation to determine the amount of increase width to be added to the nominal dimensions and placement of anchors.

10. All steel support columns shall have protective coating and a load capacity equal to or greater than specified on foundation plan (k=1000 pounds).

11. All foundation construction materials and installation shall be in accordance with all state and local codes.

12. Piers laid in type M or S mortar or dry stacked above first coarse with surface bonding agent applied that meets ASTM C 887 when acceptable to local building authority. Bonding agent must be intended for use for the application and shall be installed per manufactures specifications.

13. Single stacked concrete block are oriented so that the long direction is perpendicular to the long direction of the I-beam.

14. Double and triple stacked blocks must be arranged so that each layer is at right angles to the previous layer and the concrete cap block shall be perpendicular to the I-beam.

15. Maintain a minimum clearance of 18 inches beneath the homes floor joist.

16. Maintain a minimum of 12" beneath main I-beam in areas of utility connections (waste plumbing, HVAC duct, ect.).

17. Solid cap block or cement fill required at top courses of all masonry piers or pilasters.

18. Hardwood shims maybe used between I-beam and pier to level home. Shims shall be at least 3-1/2 inches wide and 6 inches long and are not to exceed 1-1/2 inch in thickness. At least 2 shims must be per pier driven from opposite sides of the I-beam. Shims must be perpendicular to I-beam and driven tight. Shims may not occupy more than 1 inch of vertical space.

19. Wind anchorage frame tiedowns straps must be located within 2 feet of end wall and at the spacing indicated in the chart between endwall frame tie downs.

20. Designs for seismic zones A, B, or C only, unless otherwise noted on plans.

21. All piers shall be constructed of 8"x8"x16" concrete masonry units conforming to ASTM C 90.

22. All reinforcing shall be Grade 60 minimum. All splices shall be lapped 24" minimum and splices shall be offset 30" minimum within same footer.

23. All concrete grout shall be 3000 psi at 28 days.

24. Reference the model plan drawing for specific foundation layout.

25. Concrete footings shall have a minimum compressive strength of 5000 psi at 28 days. Except may be 2500 psi with approved admixture that provides a water & vapor resistance at least equivalent to 5000 psi. Concrete foundation walls and other concrete exposed to weather shall have a minimum compressive strength of 3000 psi at 28 days and in moderate andsevere weather areas the concrete shall be air entrained no less than 5 percent and not more than 7 percent.See table R301.2(1) and R402.2 of IRC

26. All exterior footings shall be placed at least 12" below the undisturbed ground surface. All exterior footings shall extend below the frost line or otherwise frost protected in accordance with Sections R403.1.4.1 through R403.1.4.2 of IRC or per adopted local building code.

27. Top of foundation walls shall extend a minimum of 6-1/2" above finished adjacent grade except when a masonry veneer of 4" minimum is used. Wood floor joist shall not be closer than 18" from exposed ground in under floor space.

28. Contractor shall verify all site conditions and dimensions prior to starting foundation. Notify home manufacture of any discrepancies immediately.

29. The foundation must be designed and built to local codes and ordinances and must be approved and inspected by local building officials.

30. Access shall be to all under floor spaces. Access shall be a minimum of 18" by 24". If mechanical equipment is installed is this area, please refer to the Mechanical Code for minimum access opening. Through wall access openings shall not be located under an exterior door.

31. Under floor space shall be ventilated with a net area ratio not less than 1 square foot for each 150 square feet of under floor space area placed in accordance with local codes. Ratio may be reduced to 1/1,500 where ground is covered with Class I vapor material.

32. Field installed wiring in basement is subject to local inspection. Basement smoke alarms must be installed and tested on site.

33. Large clear spans along mating wall require a column or pier at each end. See model specific foundation plan for required capacity and additional column requirements.

34. Basement stairs (widths, handrails, clearances, headroom, landings, fire protection, etc.) are the responsibility of the owner/contractor and must be constructed to comply with local building codes.

35. Owner/contractor shall not alter basement stair opening without written approval from CMH Manufacturing.

36. Lighting and receptacles in basement are the responsibility of owner/contractor.

37. Termite protection shall be provided per the building code and local requirements and are responsibility of owner/contractor.

38. Ground snow load is indicated on foundation plans. Snow load must be verified per locality. Building has not been designed to be located within a Tsunami design zone.

39. All connection hardware, anchor bolts, straps, hold-downs, washers and fasteners shall be minimum of ASTM A653 Type G185 zinc coated galvanized or stainless when in contact with pressure treated sill plates or other pressure treated lumber.

40. This structure has not been designed to be located within flood hazard locations. When site is located in a flood hazard area as determined by the local authority having jurisdiction or flood hazard maps. The unit shall have lowest floor elevated above the design floor elevation. Foundation and anchorage designs shall be provided by a local engineer in conformance with adopted local building code and ASCE-24--14

41. Radon control, when required by a local jurisdiction, shall be provided and installed by others in accordance with appendix F of the IRC.

42. Topographic wind effects have not been considered. Home has not been designed to be located in areas designated as having local historical data documenting structural damage to buildings wind speed-up at isolated hills, ridges and escarpments.

43.Reserved.

44. Self-closing rated doors shall be installed between garage and house (on-site by other).(R302.5.1)

45. If building is located within a wind borne debris region glazed openings shall be protected from wind borne debris. Wind Borne debris protection is the responsibility of others.

46. A 6-mil polyethylene or approved vapor retarder with joints lapped not less than 12 inches shall be placed between the concrete floor slab and the base course or the prepared subgrade.

TABLE M - MINIMUM CONCRETE BLOCK PIER AND FOOTER SIZE

AT MATING WALL COLUMNS (REF. DETAILS D4 OR D5)							# of Uplift Ties
GROUND SNOW		20	30				
MAXIMUM MATING LINE SPAN BETWEEN MATING WALL COLUMN SUPPORTS	4 '	(S) 26"x26"X9" OR 30" Dia. X 11"	(S) 26"x26"X9" OR 30" Dia. X 11"				0
	6 '	(S) 26"x26"X9" OR 30" Dia. X 11"	(S) 26"x26"X9" OR 30" Dia. X 11"				0
	8 '	(S) 26"x26"X9" OR 30" Dia. X 11"	(S) 26"x26"X9" OR 30" Dia. X 11"				0
	10 '	(S) 26"x26"X9" OR 30" Dia. X 11"	(D) 34"x34"X9" OR 40" Dia. X 16"				0
	12 '	(S) 26"x26"X9" OR 30" Dia. X 11"	(D) 34"x34"X9" OR 40" Dia. X 16"				0
	14 '	(D) 34"x34"X9" OR 40" Dia. X 16"	(D) 34"x34"X9" OR 40" Dia. X 16"				0
	16 '	(D) 34"x34"X9" OR 40" Dia. X 16"	(D) 34"x34"X9" OR 40" Dia. X 16"				0
	18 '	(D) 34"x34"X9" OR 40" Dia. X 16"	(D) 34"x34"X9" OR 40" Dia. X 16"				1
	20 '	(D) 34"x34"X9" OR 40" Dia. X 16"	(D) 34"x34"X9" OR 40" Dia. X 16"				1
	22 '	(D) 34"x34"X9" OR 40" Dia. X 16"	(D) 34"x34"X9" OR 40" Dia. X 16"				1
	24 '	(D) 34"x34"X9" OR 40" Dia. X 16"	(D) 34"x34"X9" OR 40" Dia. X 16"				1
	26 '	(D) 34"x34"X9" OR 40" Dia. X 16"	(D) 34"x34"X9" OR 40" Dia. X 16"				1
	28 '	(D) 34"x34"X9" OR 40" Dia. X 16"	(D) 34"x34"X9" OR 40" Dia. X 16"				1
	30 '	(D) 34"x34"X9" OR 40" Dia. X 16"	(T) 42"x42"X13" OR 48" Dia. X 20"				1
	32 '	(D) 34"x34"X9" OR 40" Dia. X 16"	(T) 42"x42"X13" OR 48" Dia. X 20"				1
	34 '	(D) 34"x34"X9" OR 40" Dia. X 16"	(T) 42"x42"X13" OR 48" Dia. X 20"				1
	36 '	(D) 34"x34"X10" OR 40" Dia. X 16"	(T) 42"x42"X13" OR 48" Dia. X 20"				1
	46 '	(T) 42"x42"X13" OR 48" Dia. X 20"	(T) 42"x42"X13" OR 48" Dia. X 20"				1

12"x10.8plf CHASSIS BEAMS SUPPORT SPACING & PIER CONFIGURATION					
PIER SPACING	13.5' MAX	13.5' MAX			
PIER CONFIG.	(S) 26"x26"X9" OR 24" Dia.	(S) 26"x26"X9" OR 24" Dia.			

SUPPORTS UNDER MATING WALLS (PERIMETER BLOCKING)-CLEARSPANS IN FEET					
PIER SPACING	8. '	8. '			
PIER CONFIG.	(S) 26"x26"X9" OR 25" Dia.	(S) 26"x26"X9" OR 27" Dia.			

PIER SUPPORTS UNDER SIDE WALLS (PERIMETER BLOCKING)					
PIER SPACING	8' O/C MAX	8' O/C MAX			
PIER CONFIG.	(S) 26"x26"X9" OR 20" Dia.	(S) 26"x26"X9" OR 21" Dia.			

Chart Key:

(Pier Configuration) Min. footer width (inches) x Min. footer length (inches) x Min. footer depth (inches)

(S)= Single stack block configuration.

(D)= Double stack block configuration.

(T)= Triple stack block configuration.

(DR)=Double stack reinforced & fully grouted configuration.

IE. For 20 psf 160" box with 14' opening:Double stack pier on a 34"x 34" sq. footer 9" deep footing.

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27' 1 STORY- W.O ATTIC PIER SET (FRAME TIED) With Roof Pitch of 6/12 Min. to 6/12 Max.

NOTES: 1 DESIGNED FOR 100 MPH MAX. WIND SPEED.

2 DESIGNED FOR 1500 PSF MIN. ALLOWABLE SOIL BEARING CAPACITY.

3 DESIGN TO * Ultimate wind speed Vult. Per ASCE 7-10/ allowable stress design wind speed Vasd. All wind speeds are indicated as (Vasd) design speed

4 MAX. MATING WALL OPENINGS LISTED IN CHART ASSUME OPENING IN BOTH HALVES. IF ANCHOR IS TIED TO ONLY ONE COLUMN (ONE HALF) THEN HALF THE OPENING SIZE CAN BE USED WHEN LOOKING UP VALUE IN TABLE ABOVE. PIER SUPPORTS REQUIRED AT EACH SIDE OF DOOR OPENINGS AND ALL EXTERIOR WALL OPENINGS GREATER THAN 4'.

5 WHEN PIER CONFIGURATION IS NOT GIVEN IN CHART THE ACTUAL LOADS EXCEED ALL PREDESIGNED PIERS AND A LOCAL ENGINEER MUST DESIGN THE SUPPORTS FOR THE GIVEN LOADS (- UPLIFT/ + GRAVITY LOADS).

6 ALL PIERS SHALL BE EMBEDDED IN TYPE M OR S MORTAR.

7.Round footers or Round Piles with diameter as required above may be used as alternate to square footing or square footing and block piers.

Support and anchorage for 16" Max. Recess

NON CORNER- SPANS ARE NOT LOCATED WITH 6' OF END OF HOME

GROUND SNOW			PIER CONFIGURATION AND MINIMUM FOOTER SIZE UNDER SIDEWALL PORCH/ RECESS SUPPORT [1,4]									
			20 #		30 #							
Max. span[3]	UPLIFT [10] LOAD	# Brk[2]	w/ground anchors	w/concrete anchors	w/ground anchors	w/concrete anchors	w/ground	w/concrete	w/ground	w/concrete	w/ground	w/concrete
4	-128.76518 #	-1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
6	-193.14777 #	-1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
8 **	-257.53036 #	-1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
10 **	-321.91295 #	-1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
12 **	-386.29554 #	-1	(D) 34"x34"X9"	(D) 34"x34"X9"	(D) 34"x34"X9"	(D) 34"x34"X9"						

CORNER- SPANS ARE LOCATED WITH 6' OF END OF HOME

GROUND SNOW			PIER CONFIGURATION AND MINIMUM FOOTER SIZE UNDER SIDEWALL PORCH/ RECESS SUPPORT [1,4]									
			20 #		30 #							
Max. span[3]	UPLIFT [10] LOAD	# Brk[2]	w/ground anchors	w/concrete anchors	w/ground anchors	w/concrete anchors	w/ground	w/concrete	w/ground	w/concrete	w/ground	w/concrete
4	-97.993493 #	-1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
6	-146.99024 #	-1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
8 **	-195.98699 #	-1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
10 **	-244.98373 #	-1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
12 **	-293.98048 #	-1	(D) 34"x34"X9"	(D) 34"x34"X9"	(D) 34"x34"X9"	(D) 34"x34"X9"						

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Support and anchorage for 48" Max. Porch Depth

NON CORNER- SPANS ARE NOT LOCATED WITH 6' OF END OF HOME

GROUND SNOW			PIER CONFIGURATION AND MINIMUM FOOTER SIZE UNDER SIDEWALL PORCH/ RECESS SUPPORT [1,4]									
			20 #		30 #							
Max. span[3]	UPLIFT [10] LOAD	# Brk[2]	w/ground anchors	w/concrete anchors	w/ground anchors	w/concrete anchors	w/ground	w/concrete	w/ground	w/concrete	w/ground	w/concrete
4	-29.193373 #	-1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
6	-43.790059 #	-1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
8 **	-58.386746 #	-1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
10 **	-72.983432 #	-1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
12 **	-87.580119 #	-1	(D) 34"x34"X9"	(D) 34"x34"X9"	(D) 34"x34"X9"	(D) 34"x34"X9"						

CORNER- SPANS ARE LOCATED WITHIN 6' OF END OF HOME

GROUND SNOW			PIER CONFIGURATION AND MINIMUM FOOTER SIZE UNDER SIDEWALL PORCH/ RECESS SUPPORT [1,4]									
			20 #		30 #							
Max. span[3]	UPLIFT [10] LOAD	# Brk[2]	w/ground anchors	w/concrete anchors	w/ground anchors	w/concrete anchors	w/ground	w/concrete	w/ground	w/concrete	w/ground	w/concrete
4	5.3605484 #	1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
6	8.0408227 #	1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
8 **	10.721097 #	1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
10 **	13.401371 #	1	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"	(S) 26"x26"X9"						
12 **	16.081645 #	1	(D) 34"x34"X9"	(D) 34"x34"X9"	(D) 34"x34"X9"	(D) 34"x34"X9"						

NOTES:

1. Piers supports are required under all porch/ recess post and at intersection of sidewall (see key plan).
2. # Brk- Number of uplift brackets required under the support column. Brackets per Detail D6. Brackets maybe installed individually or in pairs and must be tied to a ground anchor or concrete anchor with a minimum design capacity of 3150#. An alternate uplift connector may be used which has the required uplift load indicated above. NG- Indicates that uplift exceeds standard angle and tie down capacity and alternate design is require.
3. Max. Span- Maximum distance between adjacent porch post or supports as measure parallel to box length.
4. Piers- Indicates the minimum CMU block configuration (S)ingle, (D)ouble, (T) Triple or (DR) (D)ouble (R)einforced and minimum footer size. See Detail D3 of D4 for pier configuration.
5. w/ ground anchors- Minimum footer size for gravity load support at post. Uplift is taken to ground anchor anchors placed in soil.
6. w/ concrete anchors- Minimum footer size based on gravity and uplift. Concrete anchors embedded into foot carry uplift load.
7. pier set (frame tied) foundation design for: 26' - 8 " 2-section modular
8. designed for 100 mph max. wind speed.
9. Desgin for 1500 psf min. allowable soil bearing capacity.
10. Designed to the * Ultimate wind speed Vult. Per ASCE 7-10/ allowable stress design wind speed Vasd. All wind speeds are inc #DIV/0!

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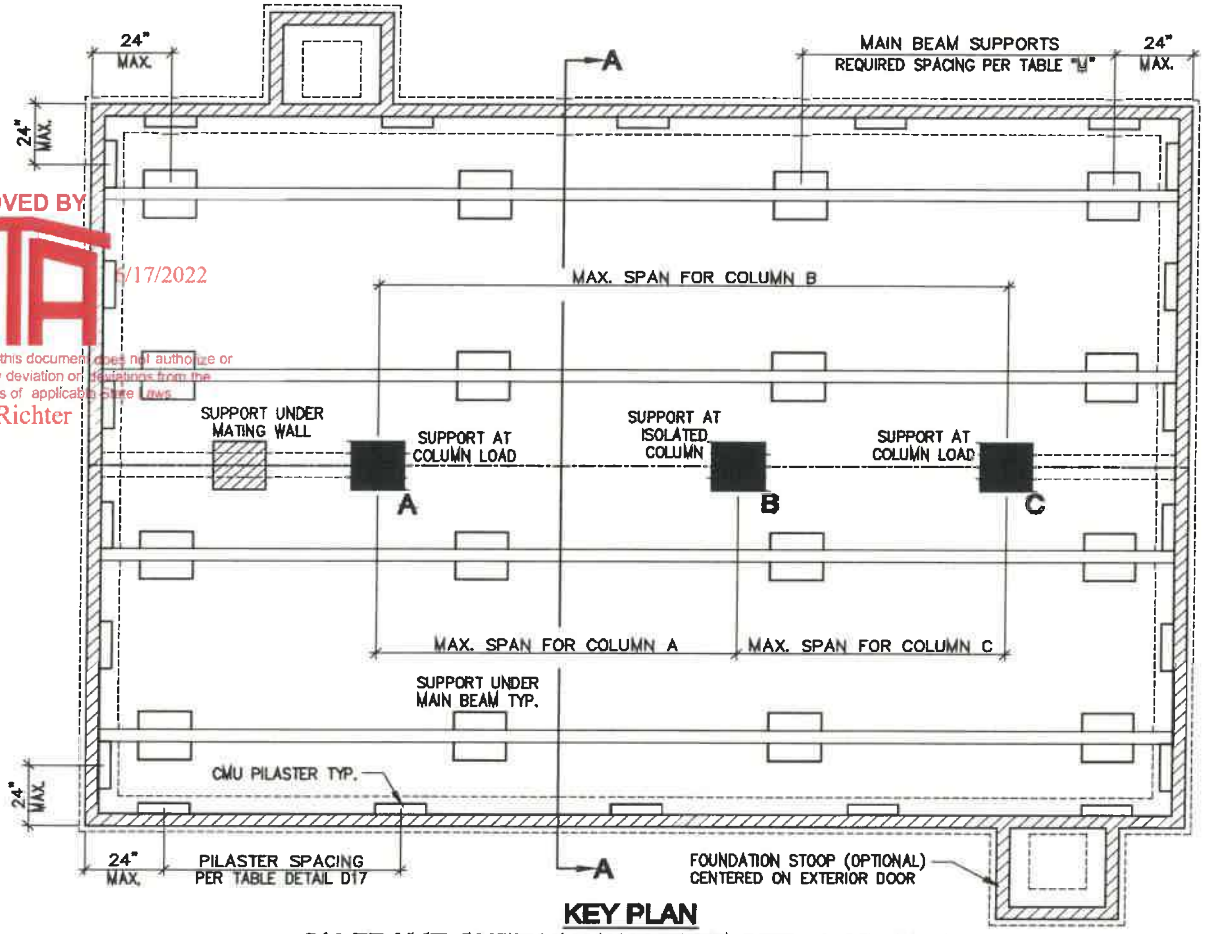
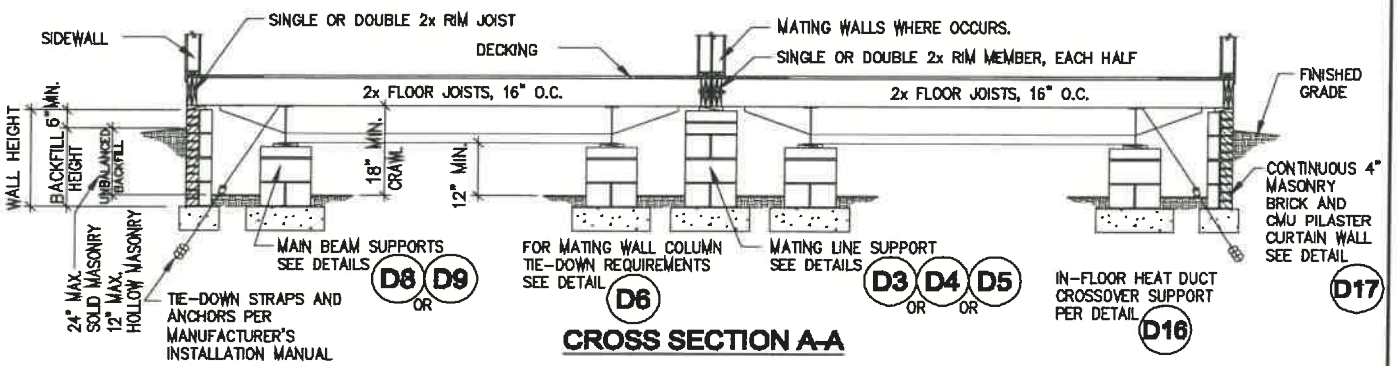
PORCH & RECESS (TABLE P)

DATE: 3/27/07 | 958N-14.R.F.E.22.22.210(4)



KEY PLAN
ON-FRAME CURTAIN WALL PIER SET - 2 SECTION
NOT TO SCALE



CROSS SECTION A-A

NOTES:

1. MARRIAGE LINE SUPPORTS SHALL SUPPORT THE MARRIAGE WALL AND COLUMNS WHERE OCCURS. SUPPORTS ARE ALSO REQUIRED AT ALL INFLOOR HEAT DUCT CROSSOVER LOCATIONS. REFER TO SPECIFIC FOUNDATION LAYOUT FOR LOCATION INFORMATION.

2. PERIMETER SUPPORTS REQUIRED AT EACH SIDE OF ALL SIDEWALL DOOR OPENINGS AND AT OPENINGS GREATER THAN 48". (BAY WINDOWS, RECESSED ENTRIES, PORCHES, ETC.) DOORS AND OPENINGS ON ENDWALLS DO NOT REQUIRE SUPPORTS. ADDITIONAL PERIMETER SUPPORTS SHALL BE LOCATED ALONG THE SIDEWALL AS REQUIRED BY ROOF LOADS.

3. SEE GENERAL NOTES SECTION FOR VENTILATION, DRAINAGE AND OTHER FOUNDATION REQUIREMENTS.

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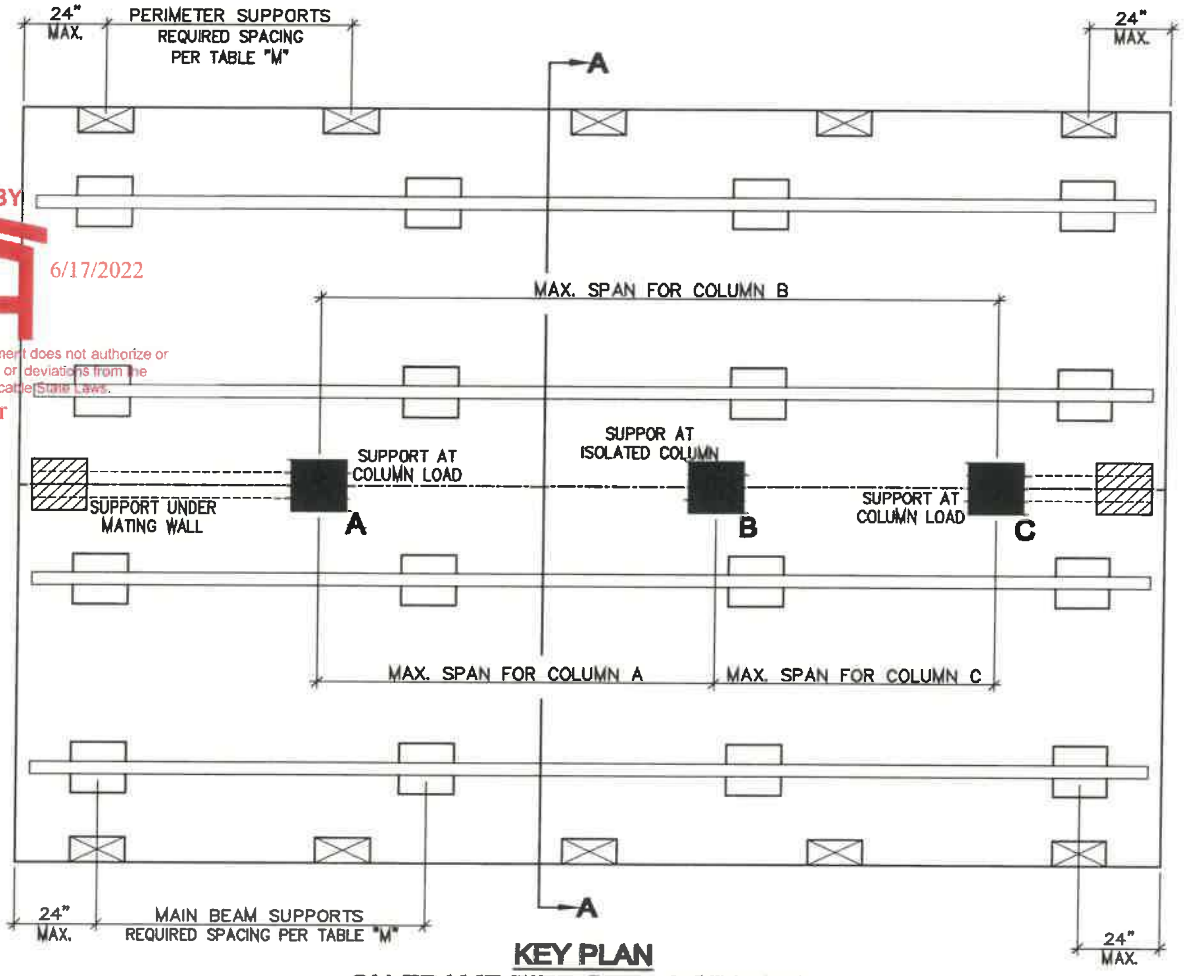
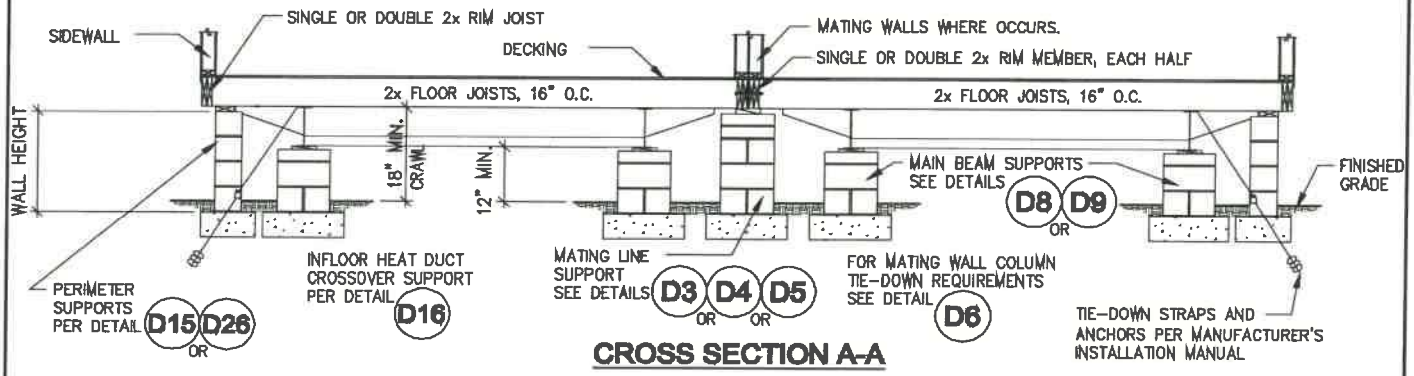
KEY PLAN 11 - ON-FRAME / CURTAIN WALL PIER SET / 2 SECTION

DATE: 06/05/07 | 958N-14.R.F.E.22.22.210(4)



KEY PLAN
ON-FRAME PIER SET - 2 SECTION
NOT TO SCALE



CROSS SECTION A-A

NOTES:

1. MARRIAGE LINE SUPPORTS SHALL SUPPORT THE MARRIAGE WALL AND COLUMNS WHERE OCCURS. SUPPORTS ARE ALSO REQUIRED AT ALL INFLOOR HEAT DUCT CROSSOVER LOCATIONS. REFER TO SPECIFIC FOUNDATION LAYOUT FOR LOCATION INFORMATION.

2. PERIMETER SUPPORTS REQUIRED AT EACH SIDE OF ALL SIDEWALL DOOR OPENINGS AND AT OPENINGS GREATER THAN 48". (BAY WINDOWS, RECESSED ENTRIES, PORCHES, ETC.) DOORS AND OPENINGS ON ENDWALLS DO NOT REQUIRE SUPPORTS. ADDITIONAL PERIMETER SUPPORTS SHALL BE LOCATED ALONG THE SIDEWALL AS REQUIRED BY ROOF LOADS.

3. SEE GENERAL NOTES SECTION FOR VENTILATION, DRAINAGE AND OTHER FOUNDATION REQUIREMENTS.

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KEY PLAN 12 - ON-FRAME / PIER SET / 2 SECTION

DATE: 06/05/07

958N-14.R.F.E.22.22.210(4)

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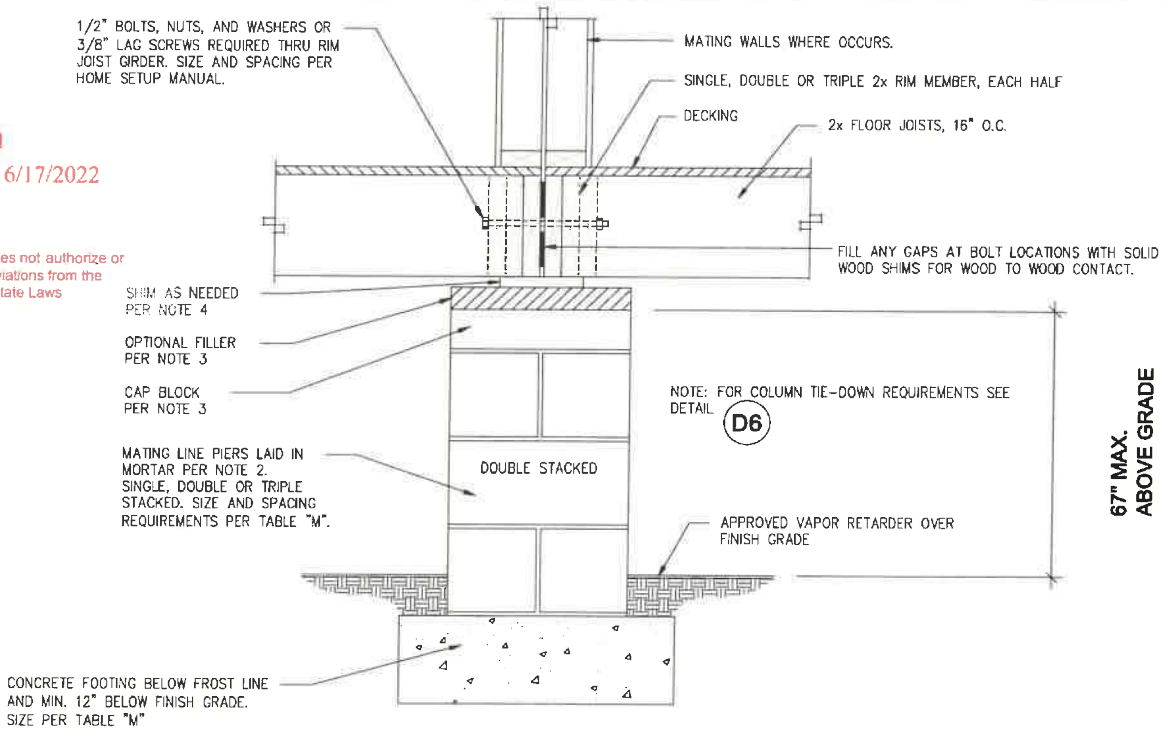

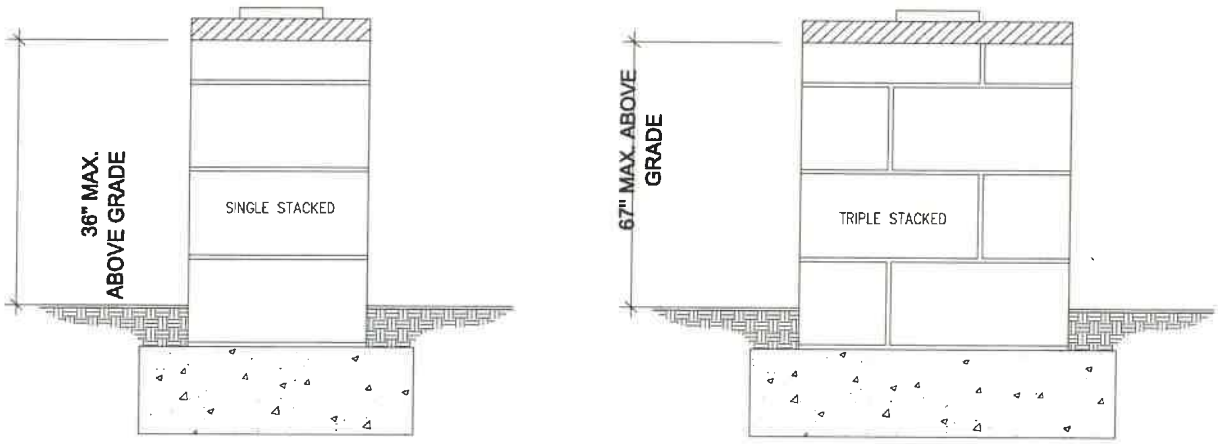

NON-REINFORCED MATING WALL OR COLUMN SUPPORT PIER
CRAWL SPACE ONLY

NOTES:

1. FOOTINGS MUST BE LEVEL IN ALL DIRECTIONS. PIERS ARE TO BE PLACED CENTERED ON THE FOOTING SO THAT THE FOOTING PROJECTION FROM THE PIER IS EQUAL FROM SIDE-TO-SIDE AND FRONT-TO-BACK. PIERS MUST BE LEVEL VERTICALLY ON ALL SIDES AND SQUARE WITH THE FOOTING.
2. CONCRETE BLOCKS FOR PIERS ARE 8" x 16" x 8" NOMINAL SIZE, HOLLOW CELL LOAD BEARING CMU's MANUFACTURED IN CONFORMANCE WITH ASTM C90, GRADE "N". OPEN CELLS ARE ALIGNED VERTICALLY.THE PIERS SHALL BE LAID IN RUNNING BOND WITH TYPE M OR S MORTAR OR APPROVED ALTERNATE (SEE GENERAL NOTE 12). SINGLE STACKED BLOCKS TO BE LAID WITH LONG SIDE PERPENDICULAR TO MATE LINE RIM JOISTS. DOUBLE STACKED BLOCK IS LAID WITH EACH LAYER AT A RIGHT ANGLE TO THE PREVIOUS LAYER. THE TOP COURSE OR THE CAP BLOCKS SHALL BE PERPENDICULAR TO THE MATE LINE RIM JOISTS.
3. CAP BLOCKS SHALL BE 4" SOLID CONCRETE OR MASONRY BLOCK. 2x NOMINAL HARDWOOD OR 1/2" STEEL MAY BE USED AS A CAP BLOCK IF THE TOP COURSE OF THE PIER IS SOLID MASONRY OR CONCRETE OR IF THE TOP COURSE OF A HOLLOW PIER IS FILLED WITH CONCRETE OR GROUT. OPTIONAL FILLER MATERIAL MAY BE 2x NOMINAL HARDWOOD OR 2" OR 4' NOMINAL SOLID CONCRETE BLOCK. ALL CAPS AND FILLER SHALL BE OF THE SAME NOMINAL DIMENSIONS AS THE PIERS THEY REST UPON. INDIVIDUAL LENGTHS OF CAP BLOCKS AND FILLER SHALL BE PERPENDICULAR TO THE MATE LINE RIM JOISTS.
4. SHIMS SHALL BE OF HARDWOOD, AT LEAST 3 1/2" WIDE AND 6" LONG AND ARE NOT TO EXCEED ONE INCH IN THICKNESS. SHIMS SHALL BE PERPENDICULAR TO MATE LINE, FITTED AND DRIVEN TIGHT BETWEEN CAP BLOCKS OR FILLER AND MATE LINE RIM JOISTS.
5. MARRIAGE LINE PIERS SHALL SUPPORT THE MARRIAGE WALL AND COLUMNS WHERE OCCURS PER MODEL SPECIFIC FOUNDATION PLAN. MAXIMUM PIER SPACING PER TABLE "M".
6. SEE GENERAL NOTES FOR DRAINAGE AND OTHER FOUNDATION REQUIREMENTS.

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NON-REINFORCED MATING WALL COLUMN SUPPORT PIER - CRAWLSPACE ONLY - DETAIL - D3

DATE: 06/13/07 | 958N-14.R.F.E.22.22.210(4)

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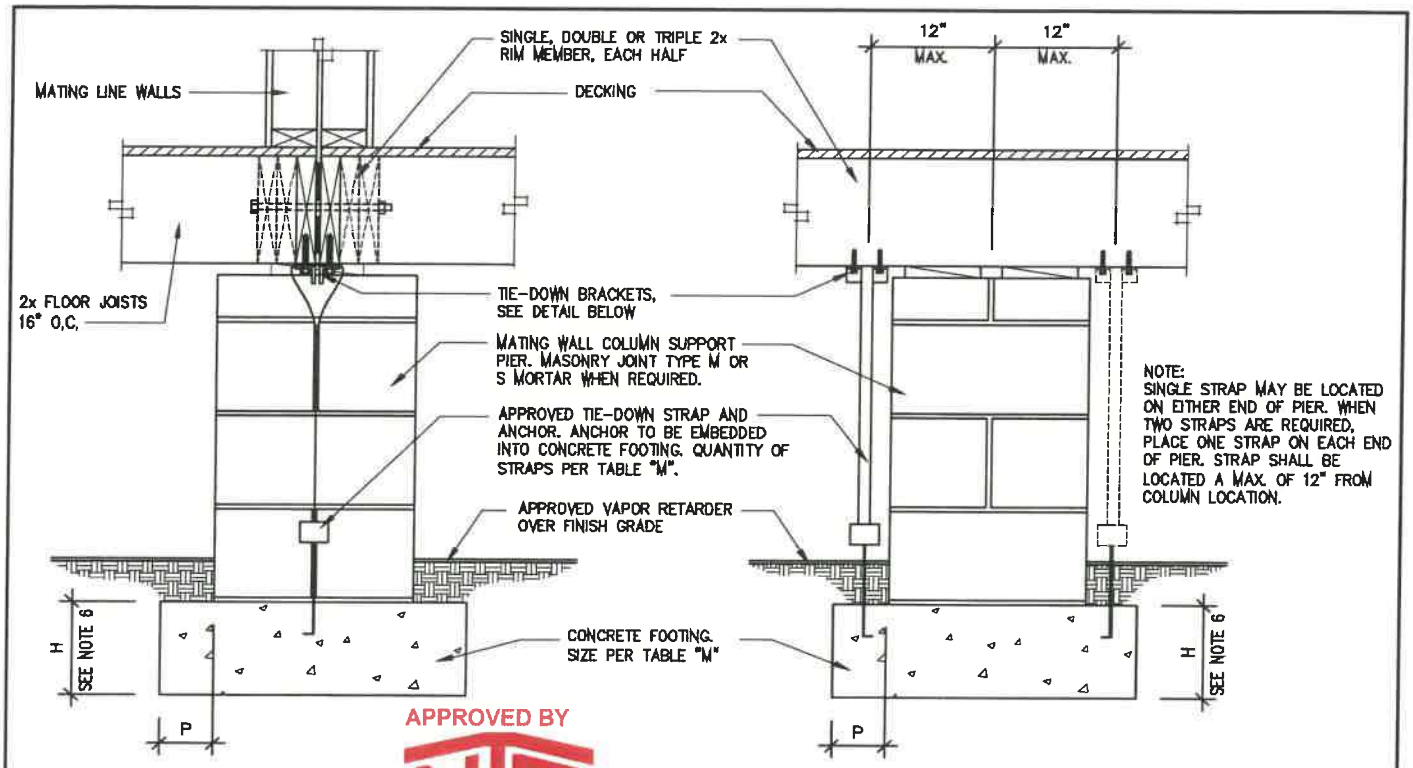

END VIEW

SIDE VIEW

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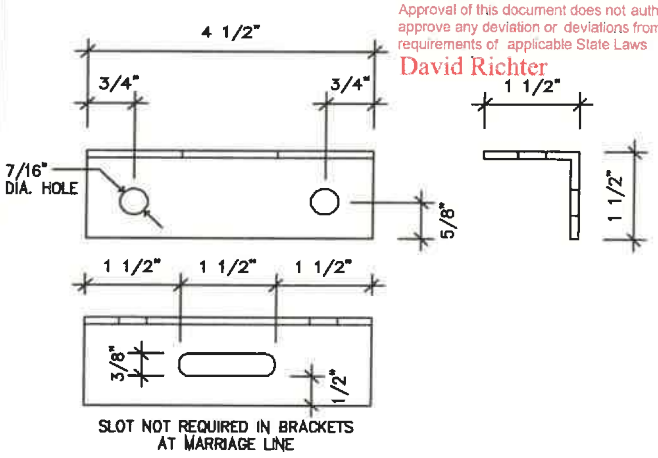

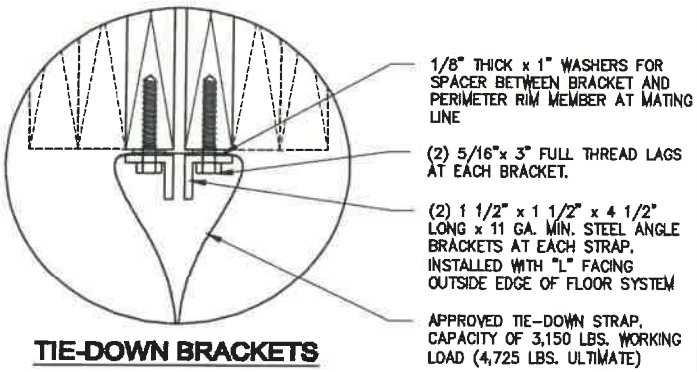

TIE-DOWN BRACKETS

MATING WALL COLUMN TIE DOWN

NOTES:
1. ALL MARRIAGE WALL COLUMN LOCATIONS WITH OPENINGS 4 FEET OR GREATER MAY REQUIRE THE INSTALLATION OF COLUMN BRACKETS AND TIE-DOWNS. SEE TABLE "M" FOR REQUIREMENTS.
2. EACH BRACKET IS RATED FOR AN ALLOWABLE WORKING LOAD OF 1,719 LBS.
3. THE CAPACITY OF BOTH THE TIE-DOWN STRAP AND ANCHOR MUST BE 3,150 LBS. WORKING LOAD (4,725 LBS. ULTIMATE)
4. USE A RADIUS CLIP FOR ALL BRACKET APPLICATIONS BY THREADING A PIECE OF STRAP OVER THE BRACKETS BEFORE LOOPING THE TIE-DOWN STRAP AROUND THE BRACKET.
5. GROUND ANCHORS WHICH ARE LISTED FOR THE REQUIRED CAPACITY ABOVE MAY BE USED IN LIEU OF CONCRETE ANCHOR.
6. DISTANCE FROM EDGE OF FOOTING TO FACE OF FOUNDATION WALL (P) SHALL NOT BE LESS THAN 2" AND SHALL NOT EXCEED THE FOOTING THICKNESS (H). FOOTING THICKNESS MAY BE 10" IF GROUND ANCHORS WITH AN UPLIFT CAPACITY OF 3,150 LBS. ARE USED IN PLACE OF CONCRETE ANCHORS.
7. FOOTING SIZES PER TABLE "M" HAVE BEEN DESIGNED ASSUMING CONCRETE ANCHORS WILL BE UTILIZED. IF GROUND ANCHORS ARE UTILIZED TO TRANSMIT UPLIFT INTO GROUND SOIL, THE DEPTH OF THE FOOTING MAY BE REDUCED TO (P). WHERE (P) IS EQUAL TO THE GREATEST DISTANCE FROM EDGE OF FOOTING TO EDGE OF PIER. MINIMUM DEPTH IS 9".

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MATING WALL COLUMN TIE DOWN - DETAIL - D6

DATE: 06/29/07

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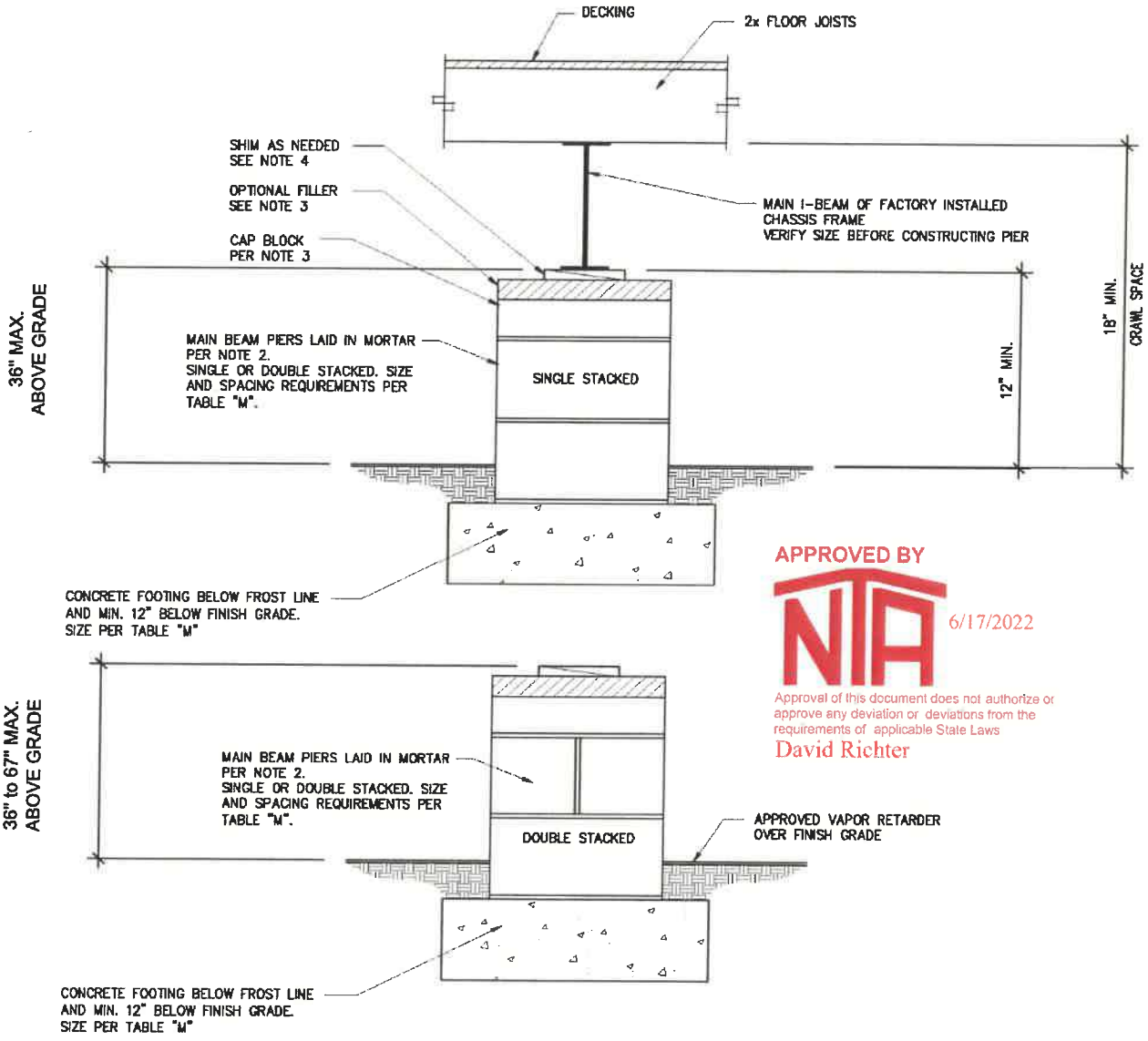

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NOTES:
1. FOOTINGS MUST BE LEVEL IN ALL DIRECTIONS. PIERS ARE TO BE PLACED CENTERED ON THE FOOTING SO THAT THE FOOTING PROJECTION FROM THE PIER IS EQUAL FROM SIDE-TO-SIDE AND FRONT-TO-BACK. PIERS MUST BE LEVEL VERTICALLY ON ALL SIDES AND SQUARE WITH THE FOOTING.
2. CONCRETE BLOCKS FOR PIERS ARE 8" x 16" x 8" NOMINAL SIZE, HOLLOW CELL LOAD BEARING CMU's MANUFACTURED IN CONFORMANCE WITH ASTM C90, GRADE "N". OPEN CELLS ARE ALIGNED VERTICALLY. THE PIERS SHALL BE LAID IN RUNNING BOND WITH TYPE M OR S MORTAR OR APPROVED ATERNATE (SEE GENERAL NOTE 12). SINGLE STACKED BLOCKS TO BE LAID WITH LONG SIDE PERPENDICULAR TO MATE LINE RIM JOISTS. DOUBLE STACKED BLOCK IS LAID WITH EACH LAYER AT A RIGHT ANGLE TO THE PREVIOUS LAYER. THE TOP COURSE OR THE CAP BLOCKS SHALL BE PERPENDICULAR TO THE MATE LINE RIM JOISTS.
3. CAP BLOCKS SHALL BE 4" SOLID CONCRETE OR MASONRY BLOCK. 2x NOMINAL HARDWOOD OR 1/2" STEEL MAY BE USED AS A CAP BLOCK IF THE TOP COURSE OF THE PIER IS SOLID MASONRY OR CONCRETE OR IF THE TOP COURSE OF A HOLLOW PIER IS FILLED WITH CONCRETE OR GROUT. OPTIONAL FILLER MATERIAL MAY BE 2x NOMINAL HARDWOOD OR 2" OR 4' NOMINAL SOLID CONCRETE BLOCK. ALL CAPS AND FILLER SHALL BE OF THE SAME NOMINAL DIMENSIONS AS THE PIERS THEY REST UPON. INDIVIDUAL LENGTHS OF CAP BLOCKS AND FILLER SHALL BE PERPENDICULAR TO THE MATE LINE RIM JOISTS.
4. SHIMS SHALL BE OF HARDWOOD, AT LEAST 3 1/2" WIDE AND 6" LONG AND ARE NOT TO EXCEED ONE INCH IN THICKNESS. SHIMS SHALL BE PERPENDICULAR TO MATE LINE, FITTED AND DRIVEN TIGHT BETWEEN CAP BLOCKS OR FILLER AND MATE LINE RIM JOISTS.
5. MARRIAGE LINE PIERS SHALL SUPPORT THE MARRIAGE WALL AND COLUMNS WHERE OCCURS PER MODEL SPECIFIC FOUNDATION PLAN. MAXIMUM PIER SPACING PER TABLE "M".
6. SEE GENERAL NOTES FOR DRAINAGE AND OTHER FOUNDATION REQUIREMENTS.

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ON FRAME PIER - DETAIL - D8

DATE: 06/13/07

958N-14.R.F.E.22.22.210(4)

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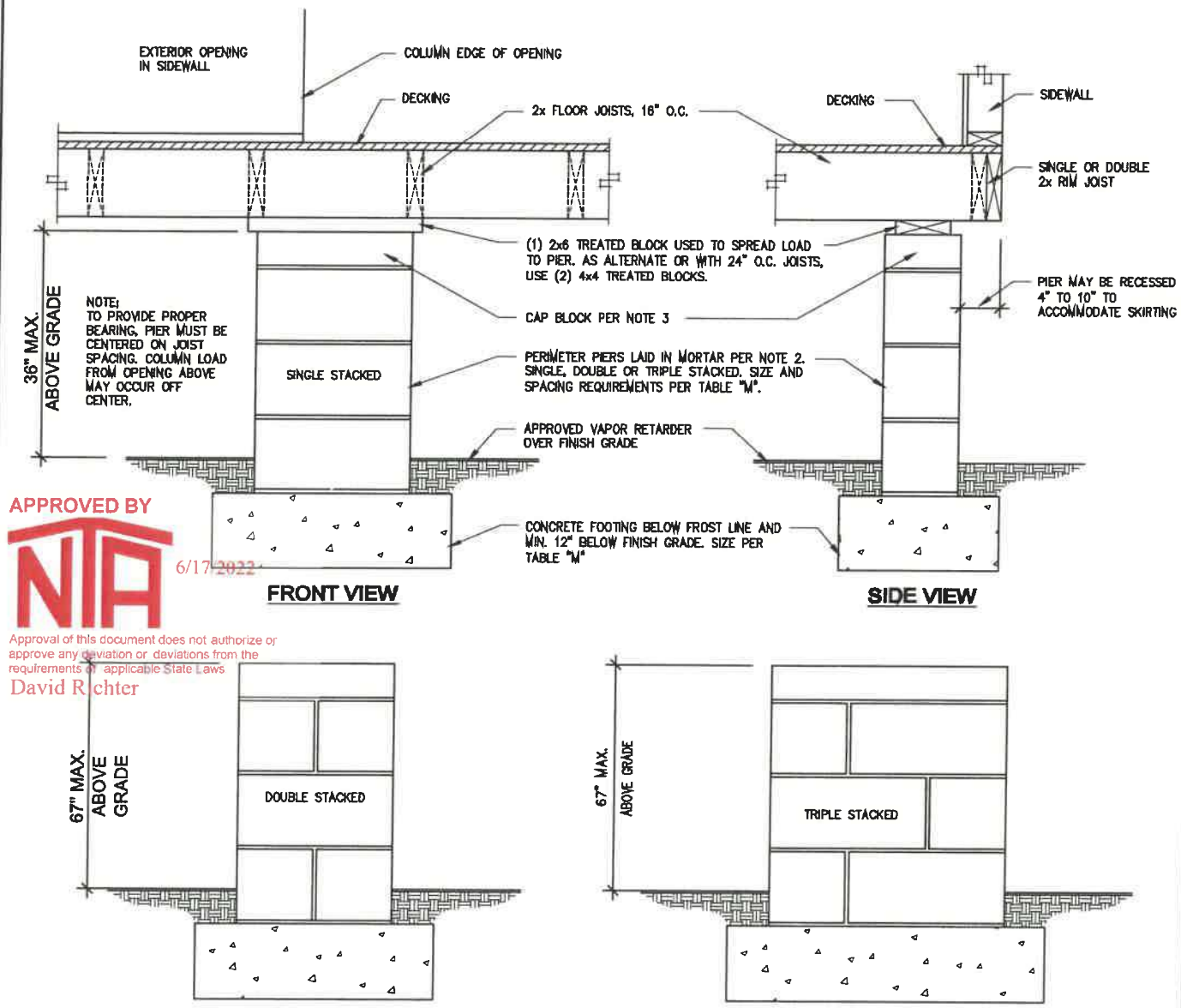

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NON-REINFORCED PERIMETER OR PORCH POST SUPPORT PIER

NOTES:

1. FOOTINGS MUST BE LEVEL IN ALL DIRECTIONS. PIERS ARE TO BE PLACED CENTERED ON THE FOOTING SO THAT THE FOOTING PROJECTION FROM THE PIER IS EQUAL FROM SIDE-TO-SIDE AND FRONT-TO-BACK. PIERS MUST BE LEVEL VERTICALLY ON ALL SIDES AND SQUARE WITH THE FOOTING.
2. CONCRETE BLOCKS FOR PIERS ARE 8" x 16" x 8" NOMINAL SIZE, HOLLOW CELL LOAD BEARING CMU's MANUFACTURED IN CONFORMANCE WITH ASTM C90, GRADE "N". OPEN CELLS ARE ALIGNED VERTICALLY. SEE NOTE 7. FOR MORTAR REQUIREMENT. SINGLE STACKED BLOCKS TO BE LAID WITH LONG SIDE PERPENDICULAR TO MATE LINE RIM JOISTS. DOUBLE STACKED BLOCK IS LAID WITH EACH LAYER AT A RIGHT ANGLE TO THE PREVIOUS LAYER. THE TOP COURSE OR THE CAP BLOCKS SHALL BE PERPENDICULAR TO THE MATE LINE RIM JOISTS.
3. CAP BLOCKS SHALL BE 4" SOLID CONCRETE OR MASONRY BLOCK. 2x NOMINAL HARDWOOD OR 1/2" STEEL MAY BE USED AS A CAP BLOCK IF THE TOP COURSE OF THE PIER IS SOLID MASONRY OR CONCRETE OR IF THE TOP COURSE OF A HOLLOW PIER IS FILLED WITH CONCRETE OR GROUT. OPTIONAL FILLER MATERIAL MAY BE 2x NOMINAL HARDWOOD OR 2" OR 4' NOMINAL SOLID CONCRETE BLOCK. ALL CAPS AND FILLER SHALL BE OF THE SAME NOMINAL DIMENSIONS AS THE PIERS THEY REST UPON. INDIVIDUAL LENGTHS OF CAP BLOCKS AND FILLER SHALL BE PERPENDICULAR TO THE MATE LINE RIM JOISTS.
4. SHIMS SHALL BE OF HARDWOOD, AT LEAST 3 1/2" WIDE AND 6" LONG AND ARE NOT TO EXCEED ONE INCH IN THICKNESS. SHIMS SHALL BE PERPENDICULAR TO MATE LINE, FITTED AND DRIVEN TIGHT BETWEEN CAP BLOCKS OR FILLER AND MATE LINE RIM JOISTS.
5. MARRIAGE LINE PIERS SHALL SUPPORT THE MARRIAGE WALL AND COLUMNS WHERE OCCURS PER MODEL SPECIFIC FOUNDATION PLAN. MAXIMUM PIER SPACING PER TABLE "M".
6. SEE GENERAL NOTES FOR DRAINAGE AND OTHER FOUNDATION REQUIREMENTS.
7. THE PIERS SHALL BE LAID IN RUNNING BOND WITH TYPE M OR S MORTAR OR DRY STACKED ABOVE FIRST COARSE WITH SURFACE BONDING AGENT APPLIED THAT MEETS ASTM C887 WHEN ACCEPTABLE TO LOCAL AUTHORITY. BONDING AGENT MUST BE INTENDED FOR USE/APPLICATION AND SHALL BE INSTALLED PER MANUFACTURES SPECIFICATINS.

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NON-REINFORCED PERIMETER/ PORCH POST SUPPORT PIER - DETAIL - D15

DATE: 07/18/07

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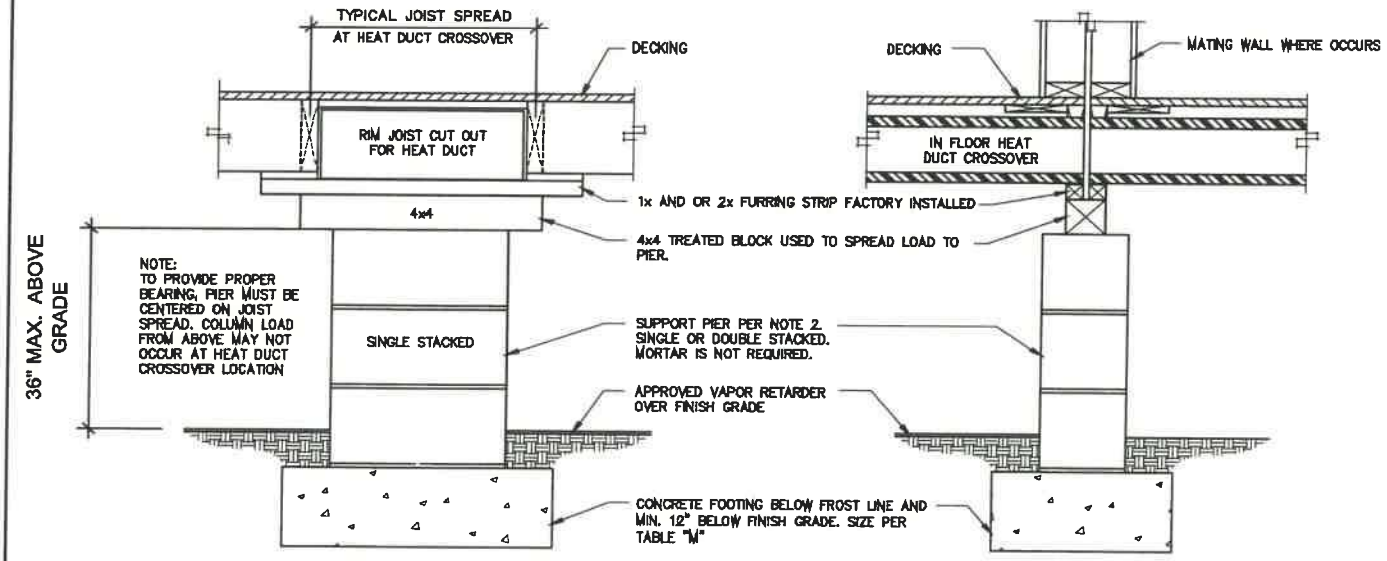
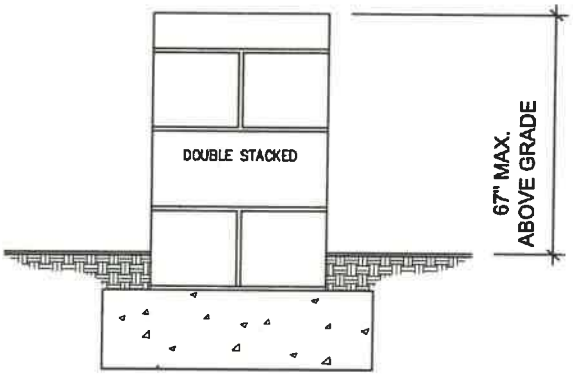


FRONT VIEW

SIDE VIEW



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NON-REINFORCED IN FLOOR HEAT DUCT CROSSOVER SUPPORT PIER

NOTES:

1. FOOTINGS MUST BE LEVEL IN ALL DIRECTIONS. PIERS ARE TO BE PLACED CENTERED ON THE FOOTING SO THAT THE FOOTING PROJECTION FROM THE PIER IS EQUAL FROM SIDE-TO-SIDE AND FRONT-TO-BACK. PIERS MUST BE LEVEL VERTICALLY ON ALL SIDES AND SQUARE WITH THE FOOTING.
2. CONCRETE BLOCKS FOR PIERS ARE 8" x 16" x 8" NOMINAL SIZE, HOLLOW CELL LOAD BEARING CMU's MANUFACTURED IN CONFORMANCE WITH ASTM C90, GRADE "N". OPEN CELLS ARE ALIGNED VERTICALLY. SHALL BE LAID IN TYPE M OR S MORTAR. SINGLE STACKED BLOCKS TO BE LAID WITH THE LONG SIDE PARALLEL TO THE PERIMETER RAIL. DOUBLE STACKED BLOCK IS LAID WITH EACH LAYER AT A RIGHT ANGLE TO THE PREVIOUS LAYER. THE TOP COURSE OR CAP BLOCK SHALL BE PARALLEL TO THE PERIMETER RAIL.
3. CAP BLOCKS SHALL BE 4" SOLID CONCRETE OR MASONRY BLOCK. 2x NOMINAL HARDWOOD OR 1/2" STEEL MAY BE USED AS A CAP BLOCK IF THE TOP COURSE OF THE PIER IS SOLID MASONRY OR CONCRETE OR IF THE TOP COURSE OF A HOLLOW PIER IS FILLED WITH CONCRETE OR GROUT. ALL CAPS SHALL BE OF THE SAME NOMINAL DIMENSIONS AS THE PIERS THEY REST UPON. INDIVIDUAL LENGTHS OF CAP BLOCKS SHALL BE PARALLEL TO THE PERIMETER RAIL.
4. SHIMS SHALL BE AT LEAST 3 1/2" WIDE AND 6" LONG AND ARE NOT TO EXCEED 1" IN THICKNESS. SHIMS SHALL BE FITTED AND DRIVEN TIGHT BETWEEN SPREADER BLOCK AND RIM JOISTS.
5. SUPPORT PIER REQUIRED ALONG MATING LINE AT EACH IN FLOOR HEAT DUCT CROSSOVER LOCATION.
6. SEE GENERAL NOTES FOR DRAINAGE AND OTHER FOUNDATION REQUIREMENTS.
7. IF STANDARD MATING WALL SUPPORTS ARE NOT REQUIRED UNDER MATING WALL PER TABLE "M" THEN PIERS AND FOOTINGS SHOULD BE CONSTRUCTED AS REQUIRED FOR AN 8 FT. MATING WALL OPENING.

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NON-REINFORCED IN FLOOR HEAT DUCT CROSSOVER SUPPORT PIER - DETAIL - D16

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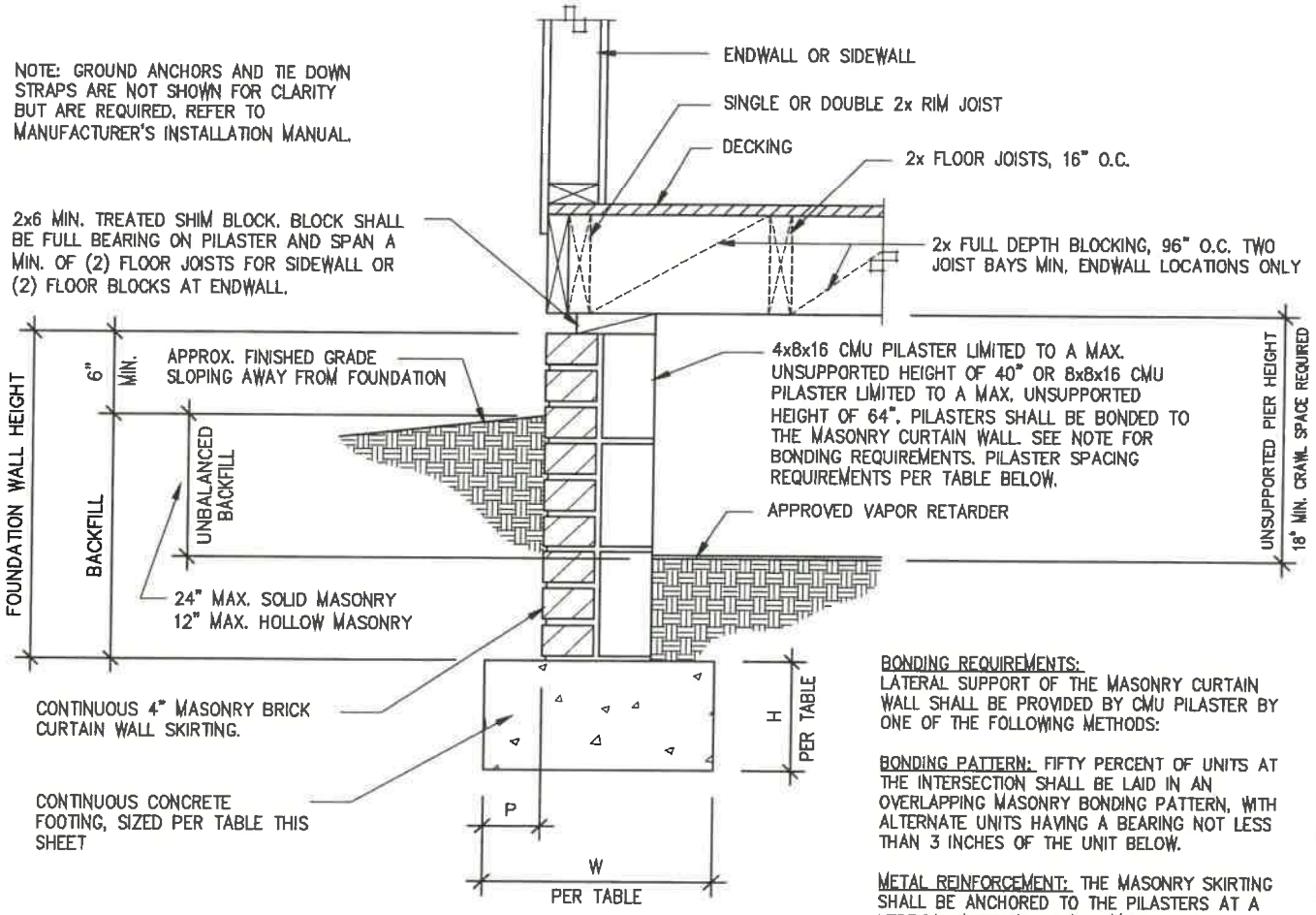

BONDING REQUIREMENTS:
LATERAL SUPPORT OF THE MASONRY CURTAIN WALL SHALL BE PROVIDED BY CMU PILASTER BY ONE OF THE FOLLOWING METHODS:

BONDING PATTERN: FIFTY PERCENT OF UNITS AT THE INTERSECTION SHALL BE LAID IN AN OVERLAPPING MASONRY BONDING PATTERN, WITH ALTERNATE UNITS HAVING A BEARING NOT LESS THAN 3 INCHES OF THE UNIT BELOW.

METAL REINFORCEMENT: THE MASONRY SKIRTING SHALL BE ANCHORED TO THE PILASTERS AT A VERTICAL INTERVAL OF NOT MORE THAN 8 INCHES WITH JOINT REINFORCEMENT OF AT LEAST 9 GA., OR 1/4 INCH GALVANIZED MESH HARDWARE CLOTH

BLOCK SIZE	MAXIMUM PILASTER SPACING PER ROOF LIVE LOAD					GROUND ANCHORS [2]		H/ CONCRETE ANCHORS [3]	
	20	30				W	H	W	H [6]
4"X8"X16"	6 ' O.C.	6 ' O.C.				12 "	8 "	12 "	10 "
8"X8"X16"	6 ' O.C.	6 ' O.C.				23 "	10 "	23 "	10 "

CURTAIN WALL AND PILASTER FOUNDATION WALL
27 ' WIDE 1 STORY- W.O ATTIC
SEISMIC ZONE C MAX. WIND SPEED OF 100 MPH
PIER SET ONLY

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NOTES:
1. THIS DETAIL IS APPLICABLE FOR USE ONLY WHEN ALL OF THE FOLLOWING ARE TRUE:
   a. ON FRAME FLOOR WITH PIER AND STRAP FOUNDATION AND ANHCORAGE SYSTEM.
   b. SEISMIC ZONE DOES NOT EXCEED SEISMIC ZONE C.
2. STRUCTURE IS ANCHORED PER OTHER DETAILS WITH STRAPS AND GROUND ANCHORS.
3. STRUCTURE IS ANCHORED PER OTHER DETAILS WITH STRAPS AND CONCRETE ANCHORS EMBEDDED INTO PERIMETER FOOTING AS SIZED ABOVE. CONCRETE ANCHOR SHALL HAVE LISTED DESIGN CAPAICITY OF 3150# MINIMUM.
4. PILASTER CONSTRUCTION MAY SUBSTITUTE FOR PERIMETER PIER REQUIREMENTS WHEN ALL CELLULAR SPACES ARE FILLED SOLIDLY WITH CONCRETE OR TYPE M OR S MORTAR.
5. HOLLOW PIERS SHALL BE CAPPED WITH 4" OF SOLID MASONRY OR CONCRETE OR THE CAVITIES OF THE TOP COURSE SHALL BE FILLED WITH CONCRETE OR GROUNT.
6. FOR EVERY 1 1/2" OF SOIL FILL ABOVE TOP OF FOOTER, 1" MAY BE SUBTRACTED FROM REQUIRED FOOTER DEPTH (H) FOR CONCRETE ANCHORS BUT SHALL NOT BE LESS THEN H AS SIZED FOR GROUND ANCHORS.

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CURTAIN WALL AND PILASTER FOUNDATION WALL PIER SET ONLY - DETAIL - D17

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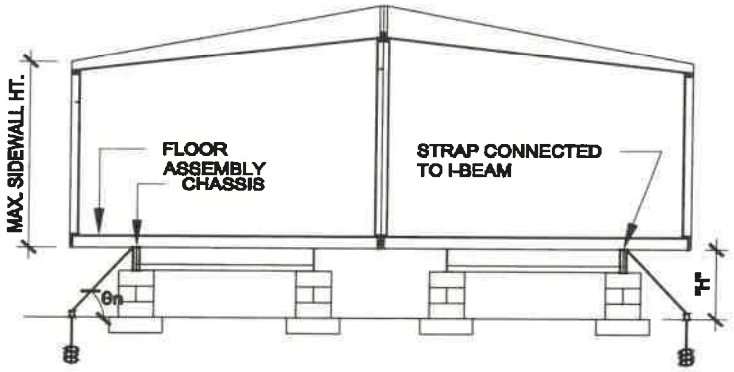

USE:
WIND ZONE 1 OR 90 MPH WIND WHERE
θn ≤ 60°

WIND ZONE 1 OR 90 MPH WIND WHERE
θn > 60°

HEIGHT "H"	(2) BOX 160" UNIT WIDTHS CONFIG. TYPE	MAX. SPACING (L2) 6/12	
20 in	1	12 ft	
30 in	1	12 ft	
40 in	1	12 ft	
50 in	3	7.71*	
60 in	3	7.71*	

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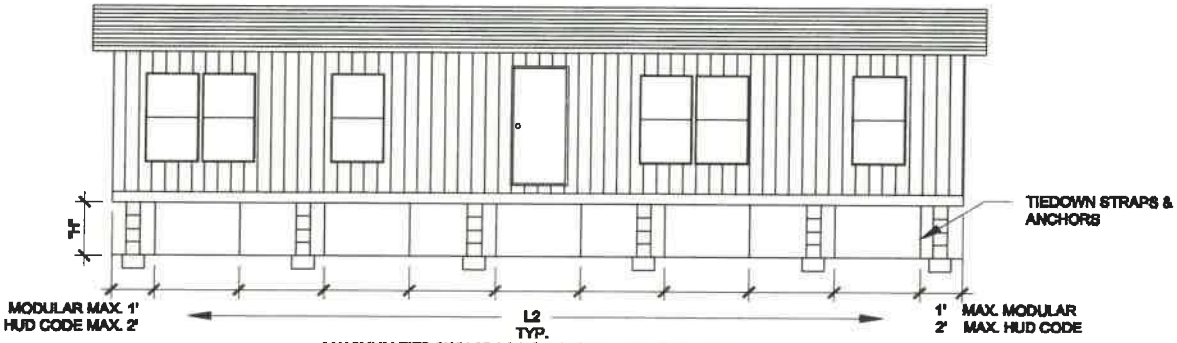
David Richter

** Additional strap must be attached to far beam frame tiedown installed since near beam strap angle exceeds 60 degrees .*



MAXIMUM TIEDOWN SPACING (L2) PER CHARTS ABOVE

TYPICAL SIDE ELEVATION SHOWING TIE-DOWN SPACING

NOTES:

1 MAXIMUM SIDEWALL HEIGHT OF 115.25 inches, & MAXIMUM OVERHANG OF 12 ".
2 MAXIMUM ANCHOR INSET OF 6".
3 DESIGNED TO IRC (2015)
4 MAXIMUM WIND SPEED OF 100 MPH.
5 ANCHOR EQUIPMENT & STRAPS SHALL HAVE A LISTED DESIGN CAPACITY OF : ANCHORS=3150LBS. STRAPS=3150 LBS. & VERTICAL SIDEWALL ATTACHMENTS=1062 LBS.
6 CHASSIS BEAM SPACE =99.5".
7 RESERVED
8 ANCHORING EQUIPMENT SHALL BE INSTALLED PER MFG. INSTRUCTIONS AND SHALL BE CERTIFIED FOR SITE CONDITIONS INCLUDING SOIL TYPE FOR DESIGN CAPACITY OF 3150 LBS. WITH PULL APPLIED AT A 30 DEGREE MINIMUM ANGLE FROM HORIZONTAL.
9 SEE SETUP MANUAL FOR ALL OTHER SETUP REQUIREMENTS INCLUDING SHEARWALL TIEDOWN REQUIREMENTS.
10 SPACING (L2) MAY NOT BE LESS THEN TWICE THE EMBEDMENT DEPTH OF THE ANCHOR.

Schult

TRANSVERSE TIEDOWN ANCHORAGE REQUIREMENTS

DATE 8/28/08

958N-14.R.F.E.22.22.210(4)

PAGE #:

MAX. PIER HEIGHT	LONGITUDINAL TIEDOWN QUANTITY SUMMARY TABLE: WIND SPEED 100 MPH MINIMUM UNIT LENGTHS:								
	30 '	36 '	42 '	48 '	54 '	60 '	66	72	78 '
24"	1	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
28"	1	1	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
36"	2	1	1	1	N.R.	N.R.	N.R.	N.R.	N.R.
44"	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
52"	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
64"	1	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.

APPROVED BY

NTA 6/17/2022

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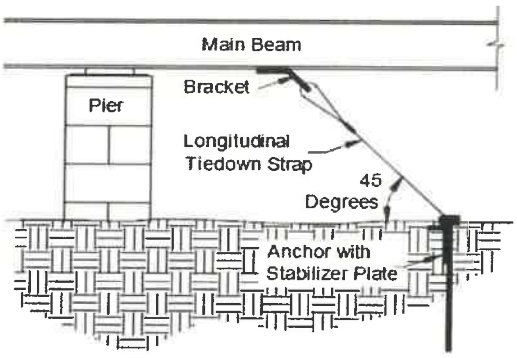
David Richter



ATTACH STRAPS TO THE BRACKET WELDED BY THE MANUFACTURER TO THE FRAME. IF NO BRACKETS HAVE BEEN INSTALLED, USE APPROVED BEAM CLAMPS DESIGNED SPECIFICALLY FOR THIS PURPOSE, AVAILABLE FROM ANCHOR SUPPLIERS OR CONNECT THE STRAP TO A SPRING HANGER OR A CROSSMEMBER (WITHIN 3" OF THE MAIN I-BEAM). CONNECT STRAPS TO ANCHORS FOLLOWING SAME PROCEDURE AS FOR SIDEWALL FRAME ANCHORS. PROTECTION OFTHE STRAP AT SHARP CORNERS MUST BE PROVIDED.

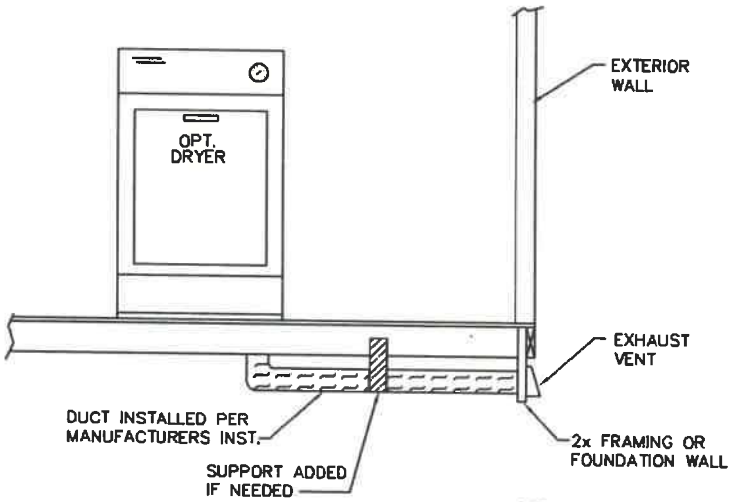
NOTES:

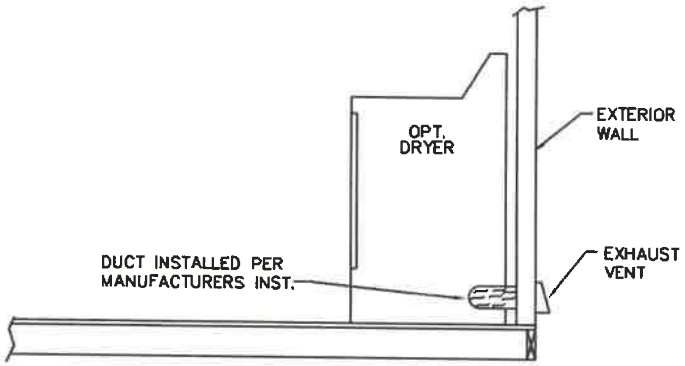
1 MAXIMUM SIDEWALL HEIGHT OF 115.25 inches. & MAXIMUM OVERHANG OF 12 ".
2 MAXIMUM WIND SPEED OF 100 MPH.
3 DESIGNED TO IRC (2015)
4 MAXIMUM ROOF PITCH=6/12.
5 ANCHOR EQUIPMENT & STRAPS SHALL HAVE A LISTED DESIGN CAPACITY OF : ANCHORS=3150LBS. STRAPS=3150 LBS. & VERTICAL SIDEWALL ATTACHMENTS=1062 LBS.
6 TIEDOWN STRAP ANGLE FROM HORIZONTAL SHALL NOT EXCEED 45 DEGREES.
7 160" MAX UNIT WIDTH DOUBLE WIDE
8 NUMBER OF LONGITUDINAL TIEDOWNS REQUIRED PER END OF EACH HOME PER TABLE TABLE MUST BE INSTALLED.
9 ANCHORING EQUIPMENT SHALL BE INSTALLED PER MFG. INSTRUCTIONS AND SHALL BE CERTIFIED FOR SITE CONDITIONS INCLUDING SOIL TYPE FOR DESIGN CAPACITY OF 3150 LBS. WITH PULL APPLIED AT A 30 DEGREE MINIMUM ANGLE FROM HORIZONTAL.
10 SEE SETUP MANUAL FOR ALL OTHER SETUP REQUIREMENTS INCLUDING SHEARWALL TIEDOWN REQUIREMENTS.
11 N.R.: NOT REQUIRED-LONGITUDINAL TIE STRAPS ARE NOT REQUIRED ON THESE CONDITIONS

Schult

LONGITUDINAL TIEDOWN ANCHORAGE REQUIREMENTS

DATE 8/28/08 | 958N-14.R.F.E.22.22.210(4)





INSTALLTION INSTRUCTIONS:

EXHAUST DUCTS FOR DOMESTIC CLOTHES DRYERS SHALL BE CONSTRUCTED OF METAL OR NONCOMBUSTIBLE MATERIAL OF EQUAL STRENGTH AND CORROSION RESISTANCE AND SHALL HAVE A SMOOTH INTERIOR FINISH. NO PART OF THE DRYER DUCT TO BE IN CONTACT WITH THE GROUND. THE DUCT TO RUN TO THE OUTSIDE OF THE UNIT AND SHALL NOT TERMINATE UNDERNEATH THE UNIT. A APPROVED DAMPER TO BE INSTALLED ON THE END OF THE DUCT.

GENERAL NOTES:

APPROVAL SEAL:

CMH Engineering

TITLE:
DRYER VENT INSTALLATION

Drawn by: O'Neal
Date: 4/11/07 Dwg #:

ELECTRICAL LEGEND (NOT TO SCALE)			
	LIGHT		PANEL BOX
CAN	CAN LIGHT	T	THERMOSTAT
PC	PULL CHAIN LIGHT	S	SWITCH
	BATH FAN	S3	3-WAY SWITCH
	FLUORESCENT LIGHT	T	PHONE JACK
TV	CABLE JACK	SD CO	CEILING MOUNT C.O. & SMOKE DETECTOR
	15 AMP RECEPT FLOOR LEVEL	CO	CEILING MOUNT C.O. DETECTOR
	15 AMP RECEPT CABINET LEVEL	SD	WALL MOUNT SMOKE DETECTOR
	15 AMP RECEPT SIDEWAYS	SD	CEILING MOUNT SMOKE DETECTOR
	20 AMP RECEPT FLOOR LEVEL		SWITCH LEG
	20 AMP RECEPT CABINET LEVEL	GFCI	JUNCTION BOX
	20 AMP RECEPT SIDEWAYS		CEILING FAN
	240 VOLT RECEPT		
WP GFI	15 AMP WATERPROOF RECEPT		POT & PAN RACK
WP GFI	20 AMP WATERPROOF RECEPT		HEAT TAPE RECEPT
	FURNACE	WH	WATER HEATER
A DASHED SYMBOL REPRESENTS AN OPTION			
GFI-INDICATES A GROUND FAULT PROTECTED RECEPT			

PLUMBING FIXTURE DESCRIPTION CHART

APPLIANCE	MANUFACTURER	MODEL #	ANSI/ASME STANDARD
TOILET	BRISTOL BAY	VCEFB-03B	
SINKS	LYONS EL MUSTICE & SON PREMIUM FLOW CORESTONE & TEKA REVERE	KS01P4-TB #610 UTILITY SINGLE BOWL DOUBLE BOWL BAR SINK	
LAVITORIES	BRISTOL BAY	VCL-10	
TUB SHOWER	BAYMONT BATHWARE	5118 5100 5109	UL
SHOWER	BAYMONT BATHWARE	3309 3308 3304	UL
TUB	BAYMONT BATHWARE	2205 2272	UL

APPROVED BY
NTA
6/17/2022
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David Richter

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: WPL-913-014-0815_(14W)
Schult - Richfield (MFG: 00958)

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Wood Perfect, Ltd.

Pages or sheets covered by this seal: I38241174 thru I38241175

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844

APPROVED BY
NTA
6/17/2022
Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws.
David Richter

NORTH CAROLINA PROFESSIONAL SEAL 28228 ENGINEER XUEGANG LIU

August 21,2019

Liu, Xuegang

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Schult - Richfield (MFG: 00958)	I38241174
WPL-913-014-0815_(14W)	9481-15	HINGED TRUSS	1	1	M9481: 6/12 28 Wide MOD/HUD Job References (optional)	

Wood Perfect, LLC, Guin, AL 33563 — 7.640 s Aug 16 2017 MiTek Industries, Inc. Wed Aug 21 08:10:15 2019 Page 1

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APPROVED BY

NTA

6/17/2022

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David Richter

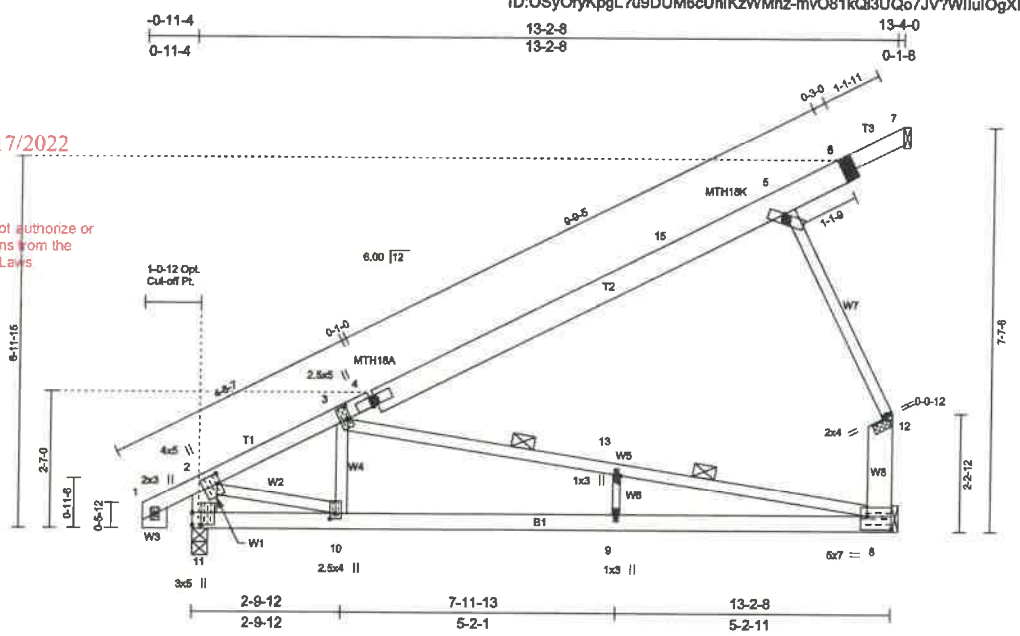

Plate Offsets (X,Y)-- [2:0-2-4,0-0-12], [3:0-3-0,0-0-12], [4:0-0-11,0-1-2], [5:0-0-11,0-1-2], [8:Edge,0-3-0], [10:0-1-4,0-1-4], [11:0-1-4,0-2-7], [11:0-2-12,0-2-0], [13:0-1-8,0-0-5]

SPACING-: 2-0-0		**SPACING-:** 1-4-0		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
LOADING (psf)		**LOADING** (psf)		Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.33	8-9	>460	240	MT20	197/144
TCLL	23.1	TCLL	34.7	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.60	8-9	>253	180	MT18HS	197/144
(Ground Snow=30.0)		(Ground Snow=45.0)		Rep Stress Incr	YES	WB	0.94	Horz(CT)	-0.01	8	n/a	n/a		
TCDL	11.0	TCDL	16.5	Code	IBC2015/TPI2014	(Matrix)							Weight: 60 lb	
BCLL	0.0 *	BCLL	0.0 *										FT = 0%	
BCDL	10.0	BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 4-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF Stud *Except* 8-12,2-11,1-14: 2x6 SPF Stud 9-13: 1-8/16x1-10/16 SPF Stud/Std

RIPPED LUMBER MUST BE RE-GRADED FOR SIZES AS SHOWN

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 1-4-12 oc bracing.
WEBS 2 Rows at 1/3 pts 3-8
JOINTS 1 Brace at Jt(s): 12

REACTIONS. (lb/size) 11=677/0-3-8, 8=547/Mechanical, 7=0/Mechanical
Max Horz 11=401(LC 12), 7=-78(LC 19)
Max Uplift 11=-294(LC 12), 8=-455(LC 12)
Max Grav 11=707(LC 19), 8=637(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-846/281, 3-4=-391/0, 4-10=-402/29, 8-12=-407/449, 2-11=-700/358
BOT CHORD 10-11=-469/141, 9-10=-695/672, 8-9=-695/672
WEBS 3-13=-557/502, 9-13=-965/894, 5-12=-448/495, 2-10=-236/801

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
6=115/68/48/0, 12=448/495/0/0

NOTES- (16)
1) Wind: ASCE 7-10; Vult=152mph (3-second gust) Vasd=120mph @24in o.c.; TCDL=4.4psf; BCDL=4.0psf; (Alt. 160mph @18in o.c.; TCDL=6.6psf; BCDL=6.0psf); h=22ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pg=30.0 psf (ground snow); Ps=23.1 psf (roof snow); Category II; Exp C; Partially Exp.; Ct=1.1
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) All plates are MT20 plates unless otherwise indicated.
8) See HINGE PLATE DETAILS for plate placement.
9) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
10) All additional member connections shall be provided by others for forces as indicated.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-0-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
13) Refer to girder(s) for truss to truss connections.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 294 lb uplift at joint 11 and 455 lb uplift at joint 8.
15) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

I certify that this document was prepared or approved by me, and I am a licensed professional engineer under the laws of the State of Maryland. Lic. No. 28044 - Expiration Date: 10/16/18.

August 21,2019

TRENCO
818 Soundside Road
Edenton, NC 27932

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: WPL-913-014-0815_(14W)
Schult - Richfield (MFG: 00958)

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Wood Perfect, Ltd.

Pages or sheets covered by this seal: I38246504 thru I38246505

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844

APPROVED BY
NTA
6/17/2022
Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws
David Richter

NORTH CAROLINA PROFESSIONAL SEAL 28228 ENGINEER XUEGANG LIU

August 21,2019

Liu, Xuegang

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Schult - Richfield (MFG: 00958)	
WPL-913-014-0815_(14W)	9481-15	HINGED TRUSS	1	1	T9481: 6/12 28 Wide MOD/HUD Tray Job Reference (optional)	I38246504

Wood Perfect, LLC, Guin, AL 33563

7.640 s Aug 16 2017 MiTek Industries, Inc. Wed Aug 21 12:05:38 2019 Page 1
ID:STKLz_7KTO426IVH1OQOzbyJwH0-bxGD8tLc4mnvzjgKMtAnBe63_XpV5BpGGJf6wDyIdkR

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NTA
6/17/2022
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David Richter

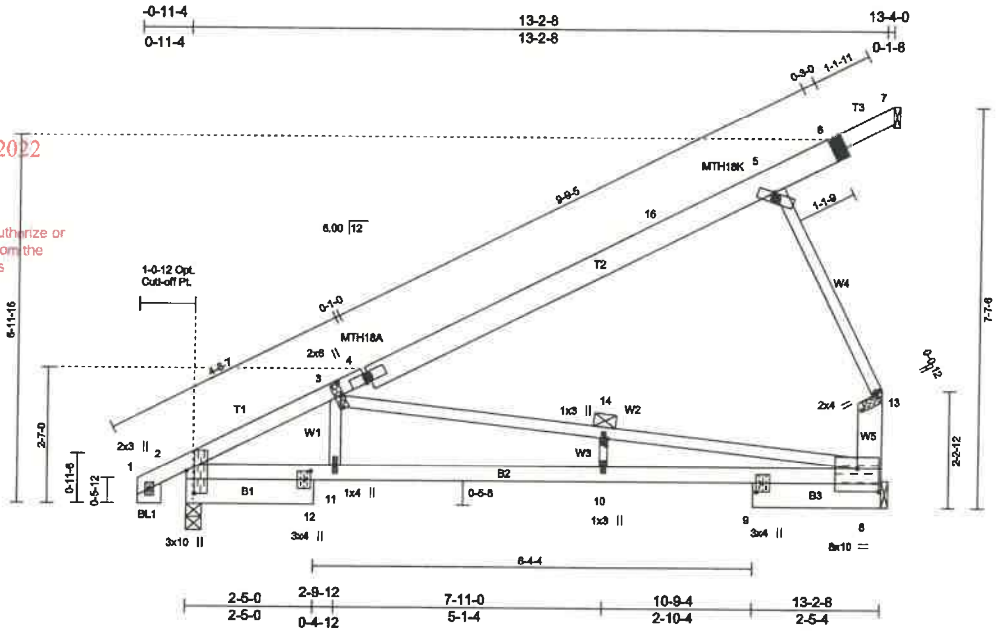


Plate Offsets (X,Y)— [2:0-5-4,0-1-13], [3:0-3-0,0-0-8], [4:0-0-11,0-1-2], [5:0-0-11,0-1-2], [8:0-6-12,0-11-10], [8:0-5-0,0-5-4], [9:0-2-0,0-1-4], [12:0-2-0,0-1-4], [14:0-1-8,0-0-5]

SPACING-: 2-0-0	SPACING-: 1-4-0	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
LOADING (psf)	LOADING (psf)	Plate Grip DOL 1.15	TC 0.50	Vert(LL) -0.33 8-10 >468 240	MT20 197/144
TCLL 23.1	TCLL 34.7	Lumber DOL 1.15	BC 0.93	Vert(CT) -0.65 8-10 >239 180	MT18HS 197/144
(Ground Snow=30.0)	(Ground Snow=45.0)	Rep Stress Incr YES	WB 0.91	Horz(CT) 0.07 8 n/a n/a	
TCDL 11.0	TCDL 16.5	Code IBC2015/TPI2014	(Matrix)		Weight: 65 lb
BCLL 0.0 *	BCLL 0.0 *				FT = 0%
BCDL 10.0	BCDL 15.0				

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
4-6: 2x6 SPF No.2
BOT CHORD 2x6 SPF No.2 *Except*
2-8: 2x4 SPF No.2
WEBS 2x3 SPF Stud *Except*
3-8: 2x3 SPF No.2, 8-13: 2x6 SPF Stud
10-14: 1-8/16x1-10/16 SPF Stud/Std
OTHERS 2x6 SPF Stud

RIPPED LUMBER MUST BE RE-GRADED FOR SIZES AS SHOWN

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-5 oc purlins, except end verticals.
Rigid ceiling directly applied or 2-2-0 oc bracing.
BOT CHORD 1 Row at midpt 3-8
WEBS
JOINTS 1 Brace at Jt(s): 13

REACTIONS. (lb/size) 2=669/0-3-8, 8=560/Mechanical, 7=0/Mechanical
Max Horz 2=425(LC 12), 7=-78(LC 10)
Max Uplift 2=-291(LC 12), 8=-458(LC 12)
Max Grav 2=699(LC 19), 8=650(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1289/577, 3-4=-891/0, 4-16=-402/29, 8-13=-407/449
BOT CHORD 2-12=-935/987, 11-12=-936/979, 10-11=-936/979, 9-10=-936/979, 8-9=-932/965
WEBS 3-11=0/516, 3-14=-825/741, 8-14=-829/739, 5-13=-448/495

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
6=115/68/48/0, 13=448/495/0/0

NOTES-
1) Wind: ASCE 7-10; Vult=152mph (3-second gust) Vasd=120mph @24in o.c.; TCDL=4.4psf; BCDL=4.0psf; (Alt. 180mph @16in o.c., TCDL=6.6psf; BCDL=6.0psf); h=22ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pg=30.0 psf (ground snow); Ps=23.1 psf (roof snow); Category II; Exp C; Partially Exp.; Ct=1.1
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) All plates are MT20 plates unless otherwise indicated.
8) See HINGE PLATE DETAILS for plate placement.
9) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
10) All additional member connections shall be provided by others for forces as indicated.
11) This truss has been designed for 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
13) Refer to girder(s) for truss to truss connections.

I certify that this document was prepared or approved by me, and I am a licensed professional engineer under the laws of the State of Maryland.
Lic. No. 28044, Expiration Date: 10/16/18.

XUEGANG LIU
Lic. No. 037973
August 21,2019

Continued on page 2

ENGINEERING BY TRENCO
818 Soundside Road
Edenton, NC 27932

NOTES-

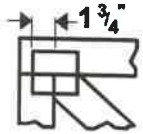
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 291 lb uplift at joint 2 and 458 lb uplift at joint 8.
15) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

APPROVED BY
NTA
6/17/2022
Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws
David Richter

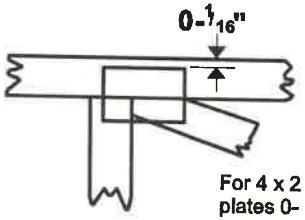
TRENCO
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

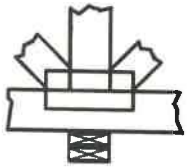
4 x 4

The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION

Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

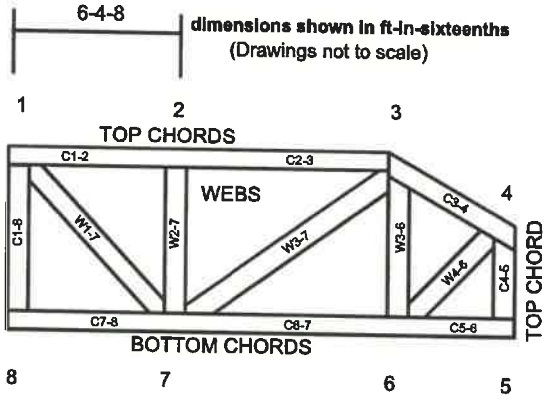


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

APPROVED BY
NTA
6/17/2022
Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws.
David Richter

PRODUCT CODE APPROVALS
ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek

ENGINEERING BY TRENCO

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

NORTH CAROLINA
MODULAR PLANS REVIEW CHECKLIST

 revised June 2018

Manufacturer	CMH Manufacturing Inc.
Model number/name	5530-28W-4BR
3rd Party	NTA Inc,
Review Date	6/17/2022
Reviewer	David Richter

		Plan Sheet Page # and NOTES	
	QC MANUAL (current and complete)		
	APPENDIX B (required and attached)	single family dwelling - not required	
	PLAN SHEETS		
	Each plan sheet third-party stamped with approver's name		
	Each plan sheets is numbered and/or indexed	IX-1	
	GENERAL (cover sheet)		
	Code References	1-0	
	Statement regarding connection to public utilities	1-0	
	Statement regarding bathrooms if not included	1-0	
	Construction type	1-0	
	Occupancy classification	1-0	
	Fire resistance ratings (if required)	1-0	
	Floor live load	1-0	
	Roof live load	1-0	
	Design wind velocity	1-0	
	Seismic information (commercial projects)	1-0	
	Thermal zones	1-0 ~ Prescriptive	
	Notice to inspections department regarding items to be site inspected	1-0	
	FLOOR PLANS		
	Interior and exterior wall layouts	1-1	
	Door and window schedule	1-0.2	
	Light and Ventilation requirements	TS-1	
	Attic access (size and location)	1-1	
	Non-prescriptive headers	Charts on 1-0, calc ref on 1-0	
	Safety glazing requirements	1-1	
	Fire rating of Exterior walls (if applicable)		
	EXTERIOR ELEVATIONS		
	Exterior materials	20-1, 20-2, 1-0.2	
	Attic ventilation requirements	20-1, 20-2	
	PLUMBING		
	Plan	locations on floor plan 1-1	
	All fixtures furnished by mfg. shown on plans	1-1	
	Materials (water supply & distribution, DWV, storm drainage)	DWV: 8-1; Supply: 9-1	
	Supply and waste risers, including DWV system (generic) beneath the building.	DWV: 8-1; Supply: 9-1	
	Water heater (type and capacity)	ref to electrical appliances on 1-0	

NORTH CAROLINA
MODULAR PLANS REVIEW CHECKLIST

	Plan Sheet Page # and NOTES
MECHANICAL	
Design calculations	attached
Installed unit capacity	attached
Supply and returns (locations and sizes)	4-1A
Duct sizes	4-1A
Specifications (units, ducts)	1-1, 4-1A
All appliances furnished by mfg. shown on plans	1-1, exhaust fans 11-1
ELECTRICAL	
Plan	11-1
Location of all electrical boxes	11-1
Electrical panel location	11-1
Note regarding main disconnect (if applicable)	
Exterior lighting and receptacles	11-1
Ground level receptacles (if applicable)	11-1
Smoke detector location(s)	11-1
Electrical load calculations	TS-5
Electrical panel layout (breaker and wire sizes, circuit schedule)	11-1
Panel and service entrance sizes	Panel: 1-0a, SE ref in set-up on 1-0
All fixtures furnished by mfg. shown on plans	11-1
ACCESSIBILITY	
(for other than 1 & 2 family dwellings)	
Entrances and means of egress	
Doors, doorways, and door hardware	
Stairs and handrails	
Toilet rooms, plumbing fixtures, grab bars, etc	
Bathrooms and shower rooms	
Occupancy specific requirements	
Multi-family dwellings: Type A and B units	
FLOOR X-SECTION	
Joists and beam sizes and spacing	1-0.2
Materials species and grade	1-0.2
Sheathing, decking, and concrete as applicable	1-0.2
Fastening instructions	1-0.2
Insulation	1-0.2
Details as required for clarification	1-0.2 , other details ref manual on 1-0.2
WALL X-SECTION	
Stud and column sizes and spacing	studs: 1-0.2; column charts: 1-0.2
Materials species and grade	1-0.2
Sheathing and bracing	1-0.2
Headers and lintels	header charts: 1-0.2
Finishes	1-0.2
Fastening instructions	1-0.2
Insulation	1-0.2
Details as required for clarification	Ref manual on 1-0.2

NORTH CAROLINA
MODULAR PLANS REVIEW CHECKLIST

	Plan Sheet Page # and NOTES
CEILING / ROOF X-SECTION	
Truss, rafter, and beam spacing	1-0.2
Lumber species and grade	1-0.2
Sheathing and decking	1-0.2
Finishes	1-0.2
Fastening instructions	1-0.2
Insulation	1-0.2
Details including NC sealed truss designs or manual reference	man ref to trusses 1-0.2, other details man ref 1-0.2
FOUNDATION PLAN	
Footings, pier, and curtain wall locations and specifications	21-30 PSF (OFF FRAME) & 21-PS (ON FRAME)
X-sections with dimensions	21-30 PSF (OFF FRAME) & 21-PS (ON FRAME)
Anchorage - sill plate to piers and curtain wall	21-30 PSF (OFF FRAME) & 21-PS (ON FRAME)
Anchorage - building to sill plate	21-30 PSF (OFF FRAME) & 21-PS (ON FRAME)
Anchorage - tie downs (lateral and longitudinal)	21-30 PSF (OFF FRAME) & 21-PS (ON FRAME)
Soil bearing capacity	21-30 PSF (OFF FRAME) & 21-PS (ON FRAME)
Minimum concrete compressive strength	21-30 PSF (OFF FRAME) & 21-PS (ON FRAME)
Mortar type	21-30 PSF (OFF FRAME) & 21-PS (ON FRAME)
Ventilation requirements (with and without vapor barrier)	21-30 PSF (OFF FRAME) & 21-PS (ON FRAME)
Crawl space access requirements	21-30 PSF (OFF FRAME) & 21-PS (ON FRAME)
ENERGY COMPLIANCE	
Demonstrated compliance	PRESCRIPTIVE
SET-UP INSTRUCTIONS	
Floor and ceiling connections	ref to set-up manual on 1-0.2
Marriage wall connections	ref to set-up manual on 1-0.2
Roof set-up and connection	ref to set-up manual on 1-0.2
Plumbing connections	ref to set-up manual on 1-0.2
Mechanical connections	ref to set-up manual on 1-0.2
Electrical connections	ref to set-up manual on 1-0.2
Fire stopping	1-0.2
Air infiltration elimination	r ef to set-up manual on 1-0.2
Notice to inspections department attachment if set-up instructions are by attachment	1-0.2
ITEMS NOT INSPECTED IN PLANT	
List of items not inspected by 3rd. Party	1-0.2
Notice to inspections department	1-0.2