TEXAS DEPARTMENT OF LICENSING & REGULATION

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Industrialized Housing and Buildings

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Pre-Certification Review of Plans and QC Manual Deviation Report

"[Click here & type name of mfg]", "[Type mfg reg #]" File #01-M00"[Click here - enter file #]" Date of Report: "[Click here & type date of rpt]" Plans approved "[Click here & type date approved]" & QC manual approved "[Click here & type date approved]" Report Prepared by: "[Click here & type names]"

	Reviewed by	•		Rev	Reviewed by	Deviations	
Code, Rule or Standard	(Initials)			Initials)	Yes	No	
2021 International Residential Code – Structural/Planning				2020 National Electric Code			
2021 International Residential Code – Mechanical				2015 International Energy Conservation Code			
2021 International Residential Code – Plumbing				Chapter 70, IHB Administrative Rules – QC Manual review			
2021 International Residential Code – Fuel Gas				Chapter 70, IHB Administrative Rules, Other (Rule)			

	Reviewed by Deviations		ations		Reviewed by	Deviations	
Code, Rule or Standard	(Initials)	Yes	No	Code, Rule or Standard	(Initials)	Yes	No
2021 International Building Code (IBC)				2015 International Energy Conservation Code (IECC) or 2013 ASHRAE 90.1, Energy Standard for Buildings Except for Low-Rise Residential Buildings (ASHRAE 90.1)			
2021 International Mechanical Code (IMC)				Other code referenced standards (Specify standards)			
2021 International Plumbing Code (IPC)				2012 Texas Accessibility Standards (TAS)			
2021 International Fuel Gas Code (IFGC)				Chapter 70, IHB Administrative Rules, Compliance Control Manual (Rule)			
2020 National Electric Code (NEC)				Chapter 70, IHB Administrative Rules, Other (Rule)			

Item#	Description of Deviation	Reference	Corrective Action Taken	Date Corrected
1.	Data plate material	Rule 70.71(a)(b)(c)		
2.	Data plate placement	Rule 70.71(c)		
3.	Data Plate: Manufacturer's name, physical address, and registration #	Rule 70.71(d)(1)		
4.	Data Plate: Serial or identification numbers of units	Rule 70.71(d)(2)		
5.	Data Plate: Decal numbers of units	Rule 70.71(d)(3)		
6.	Data Plate: Name and date of applicable codes	Rule 70.71(d)(4)		
7.	Data Plate: Identification of permissible gas type	Rule 70.71(d)(5)		
8.	Data Plate: Maximum snow (roof) load in psf	Rule 70.71(d)(6)		
9.	Data Plate: Ultimate design wind speed, nominal wind speed, wind exposure category, and risk category	Rule 70.71(d)(7)		
10.	Data Plate: Seismic design category	Rule 70.71(d)(8)		
11.	Data Plate: Occupancy/use group type	Rule 70.71(d)(9)		
12.	Data Plate: Construction type	Rule 70.71(d)(10)		
13.	Data Plate: Special conditions and/or limitations	Rule 70.71(d)(11)		

Item#	Description of Deviation	Reference	Corrective Action Taken	Date Corrected
14.	Document identification – manufacturer's name and address on every page	Rule 70.70(a)(3)		
15.	Compliance Control Manual: Purpose of manual	Rule 70.70(c)		
16.	Compliance Control Manual: Table of contents	Rule 70.70(c)(1)		
17.	Compliance Control Manual: Organization chart	Rule 70.70(c)(2)		
18.	Compliance Control Manual: Statement defining obligation, responsibility, and authority for compliance control program	Rule 70.70(c)(3)		
19.	Compliance Control Manual: Identification of compliance control personnel	Rule 70.70(c)(4)		
20.	Compliance Control Manual: Material handling methods	Rule 70.70(c)(5)		
21.	Compliance Control Manual: Identification system to mark individual modules	Rule 70.70(c)(6)		
22.	Compliance Control Manual: Plant Layout, station sequence and description of activities in each area of construction	Rule 70.70(c)(7)		
23.	Compliance Control Manual: Inspection checklist: List of inspections to be made at each station or phase	Rule 70.70(c)(8)		
24.	Compliance Control Manual: Inspection checklist: Significant areas covered	Rule 70.70(c)(8)(A)		
25.	Compliance Control Manual: Procedures for using			

Item #	Description of Deviation	Reference	Corrective Action Taken	Date Corrected
26.	Compliance Control Manual: Inspection checklist: Accept/reject criteria	Rule 70.70(c)(8)(B)		
27.	Compliance Control Manual: Inspection checklist: Energy compliance checklist	Rule 70.70(c)(8)(C)		
28.	Compliance Control Manual: Testing – Step-by-step test procedures General	Rule 70.70(c)(9)		
29.	Testing – Station or phase of construction for each test General	Rule 70.70(c)(9)		
30.	Testing – Test equipment General	Rule 70.70(c)(9)		
31.	Compliance Control Manual: Testing – Step-by-step test procedures Dielectric test	Rule 70.70(c)(9)		
32.	Testing – Test equipment Dielectric test	Rule 70.70(c)(9)		
33.	Testing – Step-by-step test procedures Continuity test	Rule 70.70(c)(9)		
34.	Testing – Test equipment Continuity test	Rule 70.70(c)(9)		
35.	Testing – Step-by-step test procedures Polarity test	Rule 70.70(c)(9)		
36.	Testing – Test equipment Polarity test	Rule 70.70(c)(9)		
37.	Testing – Step-by-step test procedures Electrical operational test	Rule 70.70(c)(9)		
38.	Testing – Test equipment Electrical operational test	Rule 70.70(c)(9)		

Item #	Description of Deviation	Reference	Corrective Action Taken	Date Corrected
39.	Testing –Rough-in Step-by-step test procedures	Rule 70.70(c)(9)		
	Gas supply pressure test			
40.	Testing – Rough-in Test equipment	Rule 70.70(c)(9)		
	Gas supply pressure test			
41.	Testing – Step-by-step test procedures	Rule 70.70(c)(9)		
	Gas supply pressure test			
42.	Testing – Test equipment	Rule 70.70(c)(9)		
	Gas supply pressure test			
43.	Testing – Rough-In Step-by-step test procedures	Rule 70.70(c)(9)		
	Water supply pressure test			
44.	Testing – Rough-In Test equipment	Rule 70.70(c)(9)		
	Water supply pressure test			
45.	Testing – Step-by-step test procedures	Rule 70.70(c)(9)		
	Water supply pressure test			
46.	Testing – Test equipment	Rule 70.70(c)(9)		
	Water supply pressure test			
47.	Testing – Rough-In Step-by-step test procedures	Rule 70.70(c)(9)		
	DWV system test			
48.	Testing – Rough-In Test equipment	Rule 70.70(c)(9)		
	DWV system test			
49.	Testing – Step-by-step test procedures	Rule 70.70(c)(9)		
	DWV system test			
50.	Testing – Test equipment	Rule 70.70(c)(9)		
	DWV system test			
51.	Testing – Step-by-step test procedures	Rule 70.70(c)(9)		
	Concrete tests			

Item #	Description of Deviation	Reference	Corrective Action Taken	Date Corrected
52.	Testing – Test equipment	Rule 70.70(c)(9)		
	Concrete tests			
53.	Testing – Step-by-step test procedures	Rule 70.70(c)(9)		
	Water tightness test (fixture test)			
54.	Testing – Test equipment	Rule 70.70(c)(9)		
	Water tightness test			
55.	Testing – Step-by-step test procedures	Rule 70.70(c)(9)		
	Testing of backflow prevention assemblies			
56.	Testing – Test equipment	Rule 70.70(c)(9)		
	Testing of backflow prevention assemblies			
57.	Testing – Step-by-step test procedures	Rule 70.70(c)(9)		
	Other – "[Click here & describe test]"			
58.	Testing – Test equipment	Rule 70.70(c)(9)		
	Other – "[Click here & describe test]"			
59.	Compliance Control Manual: Storage procedures	Rule 70.70(c)(10)		
60.	Compliance Control Manual: Statement of responsibility – compliance control	Rule 70.70(c)(11)		
61.	Compliance Control Manual: Statement of responsibility – Decals and insignia	Rule 70.70(c)(12)		
62.	Compliance Control Manual: Statement of responsibility – Application of decals and insignia	Rule 70.70(c)(12)		
63.	Compliance Control Manual: Statement of responsibility – Reporting procedure	Rule 70.70(c)(12)		
64.	Compliance Control Manual: Procedures for maintaining records – Inspections performed	Rule 70.70(c)(12)		

A – DATA PLATE and COMPLIANCE CONTROL MANUAL						
Item #	Description of Deviation	Reference	Corrective Action Taken	Date Corrected		
65.	Compliance Control Manual: Procedures for maintaining records – Decal and insignia numbers	Rule 70.70(c)(12)				
66.	Compliance Control Manual: Procedures for maintaining records – Deviations and corrective actions	Rule 70.70(c)(12)				
67.	Compliance Control Manual: Procedures for maintaining records – Site to which transported	Rule 70.70(c)(12)				
68.	Compliance Control Manual: Transportation	Rule 70.70(c)(13)				
69.	Compliance Control Manual: Regulated structures	Rule 70.70(c)(14)				

70. Records Retention Periods

70.77(d)(3) The manufacturer shall keep complete records of all decals and insignia received, decals and insignia used, and those which are on-hand. The manufacturer shall maintain these records for a minimum of **5 years** from the date the building is reported shipped.

70.70(a)(4)(G) The manufacturer shall keep a copy of all approved documents for a minimum of **ten years** from the date the last unit constructed from the documents is shipped.

70.50(a)(2)(a) The manufacturer shall submit a monthly report to the department, of all industrialized housing, buildings, modules, and modular components that were constructed and to which decals and insignia were attached during the month.

- 1) The report shall be filed in a format required by the department by no later than the 10th day of the following month.
- 2) The manufacturer shall keep a copy of the monthly report on file for a minimum of **five years**.

70.72(f) The TPIA shall furnish the manufacturer a copy of the inspection report upon completion of the in-plant inspection. The report must be kept in the manufacturer's file at least five years and a copy shall be provided to the department upon request.

Certification Report

70.60(h) The certification team will issue a plant certification, or facility evaluation, report to the manufacturer when the department has determined that the manufacturer has met the requirements for certification. A copy of the plant certification report will also be forwarded to the third party inspection agency responsible for in-plant inspections. The manufacturer and third party inspection agency will be responsible for ensuring that all conditions of certification as outlined in the certification report are met. The manufacturer must keep a copy of this report in their permanent records.

Control Of Decals

70.77(c) The control of the decals and insignia shall remain with the department.

Retrievable Records

70.70(c)(12) a procedure for maintaining reliable, retrievable records of the inspections performed, decal and insignia numbers assigned, the deficiencies and how they were corrected, and the site to which the modules or modular components were transported;

Item #	Description of Deviation	Reference	Corrective Action Taken	Date Corrected
71.	Name and date of applicable codes	Rule 70.70(b)(18)(A)		Concaca
72.	Identification of permissible gas type	Rule 70.70(b)(18)(B)		
73.	Maximum snow (roof) load in psf	Rule 70.70(b)(18)(C)		
74.	Ultimate design wind speed, nominal wind speed, wind exposure category, and risk category	Rule 70.70(b)(18)(D)		
75.	Seismic design category	Rule 70.70(b)(18)(E)		
76.	Occupancy/use group	Rule 70.70(b)(18)(F)		
77.	Construction type	Rule 70.70(b)(18)(G)		
78.	Special conditions and/or limitations	Rule 70.70(b)(18)(H)		
79.	Location of data plate on building or dwelling unit	Rule 70.70(b)(18)(l)		
80.	Location of decal on each module	Rule 70.70(b)(18)(J)		
81.	Engineering calculations- Structural load calculations	Rule 70.70(b)(11)		
82.	Document identification – manufacturer's name and address on every page, scale of no less than 1/8" and numbered in accordance with the table of contents	Rule 70.70(a)(3)		

B – PLAN	IS AND SPECIFICATIONS			
Item#	Description of Deviation	Reference	Corrective Action Taken	Date Corrected
83.	Engineering calculations- Engineer stamp and firm number	TX Bd. Prof Engineers & Land Surveyors Rule §137.33(n) & §137.77(h)		
84.	General – RES/COM check- software shows compliance to correct code edition	Rule 70.102		
85.	General – Materials, systems and equipment identification Specifications or detail drawings for all materials used in construction Materials identified Dimensioning & spacing	Rule 70.70(b)(1)		
86.	General – Materials, systems, and equipment identification - steel Steel grade (ASTM), type, and mechanical properties (Fy &Fu) in plans Steel grade (ASTM), type, and mechanical properties (Fy &Fu) match engineering	Rule 70.70(b)(1) Rule 70.70(b)(11) IBC 2205.1		
87.	Calculations General – Materials, systems, and equipment identification - Engineered products Drawings from truss manufacturer Truss design loads Truss wind loads vs project wind loads			
88.	Truss placement diagram/plan General – Materials, systems, and equipment identification - Membrane Roof Systems Listing for wind uplift			
	Listing for fire classification Applicable assemblies identified in listings Calculations showing compliance with requirements of listing (wind uplift) Fastening (adhered vs fasteners)			

Item#	Description of Deviation	Reference	Corrective Action Taken	Date
89.	General – Materials, systems, and equipment identification - Fire Rated Construction			Corrected
	UL assemblies identified by #			
90.	Stairs-			
91.	General – Listing and evaluation reports	Rule 70.70(b)(1)		
92.	Detailed drawings of all assemblies (with cross-sections as necessary to identify major building components) Listed assemblies Thermal envelope depicted	Rule 70.70(b)(2		
93.	Floor plans for all models and options	Rule 70.70(b)(3)		
94.	Electrical schematics for all models and options	Rule 70.70(b)(4)		
95.	Water system drawings for all models and options	Rule 70.70(b)(5)		
96.	Drain-waste-vent system drawings for all models and options	Rule 70.70(b)(5)		
97.	Gas piping system drawings for all models and options	Rule 70.70(b)(6)		
98.	Mechanical system drawings for all models and options	Rule 70.70(b)(7)		
99.	Fire protection details	Rule 70.70(b)(8)		
100.	Fire safety details	Rule 70.70(b)(8)		

Item#	Description of Deviation	Reference	Corrective Action Taken	Date Corrected
101.	Exit details	Rule 70.70(b)(8)		
102.	Energy compliance details, including any local amendments or alternative compliance paths to which the structure will be constructed under Occupations Code, Section 1202.1536	Rule 70.70(b)(9)		
103.	Heating, ventilation, and air conditioning details Equipment sizing Equipment specifications	Rule 70.70(b)(10)		
104.	Thermal calculations U factor calculations	Rule 70.70(b)(11)		
105.	Electrical load calculations Panel diagram includes wire and breaker size	Rule 70.70(b)(11)		
106.	Weather resistance details	Rule 70.70(b)(12)		
107.	Decay protection details	Rule 70.70(b)(13)		
108.	Insect protection details	Rule 70.70(b)(14)		
109.	Vermin protection details	Rule 70.70(b)(15)		
110.	Fastening schedule	Rule 70.70(b)(15)		
111.	Assembly instructions for all components	Rule 70.70(b)(16)		
112.	Connection instructions for all components	Rule 70.70(b)(17)		

Item#	Description of Deviation	Reference	Corrective Action Taken	Date Corrected
113.	Assembly instructions for all materials			0000.00
		Rule 70.70(b)(17)		
114.	Connection instructions for all materials			
		Rule 70.70(b)(17)		
115.	Assembly instructions for all devices			
		Rule 70.70(b)(17)		
116.	Connection instructions for all devices	Rule 70.70(b)(17)		
117.	Assembly instructions for all equipment			
		Rule 70.70(b)(17)		
118.	Connection instructions for all equipment			
		Rule 70.70(b)(17)		
119.	Assembly instructions for all appliances			
		Rule 70.70(b)(17)		
120.	General – Door Types and U-Factors Identified			
121.	General – Glazed Fenestration SHGCs Identified			
122.	General – Maintenance information			
123.	Total UA Alternative Envelope – RES Check v 3.10 or higher, or other approved energy software, used to verify compliance			
	Energy calculations (COMcheck/RESCheck/90.1)			
	Energy calculations (Continuely Reserved) 50.17			
124.	Total UA Alternative Envelope, Mechanical Requirements, Lighting Calculations			
	- COM Check v 3.8.2 or higher, or other approved energy software, used to verify			
	compliance			

Item#	Description of Deviation	Reference	Corrective Action Taken	Date Corrected
125.	Envelope – Building thermal envelope complies with prescriptive requirements where approved energy compliance software not used			
126.	Envelope – Air leakage (Mandatory) – Building thermal envelope			
127.	Envelope – Air leakage (Mandatory) – Air sealing and insulation – testing or visual inspection option			
128.	Insulation- Types and R-value of insulation			
129.	Envelope – Air leakage (Mandatory) – fireplaces			
130.	Envelope – Air leakage (Mandatory) – Window and door assemblies			
131.	Envelope – Air leakage (Mandatory) – Recessed lighting			
132.	Envelope – Air leakage (Mandatory) – Curtain walls, storefront glazing, and commercial entrance doors			
133.	Envelope – Air leakage (Mandatory) – Hot gas bypass limitation			
134.	Envelope – Air leakage (Mandatory) – Outdoor air intakes and exhaust openings			
135.	Envelope – Air leakage (Mandatory) – Loading dock weather seals			
136.	Envelope – Air leakage (Mandatory)– Vestibules			

B – PLAN	B – PLANS AND SPECIFICATIONS					
Item #	Description of Deviation	Reference	Corrective Action Taken	Date Corrected		
137.	Envelope – Maximum fenestration U-factor and SHGC (Mandatory)					
138.	Mechanical – Controls (Mandatory) – Programmable thermostat					
139.	Mechanical – Controls (Mandatory) – Heat pump supplementary heat					
140.	Mechanical – Duct sizing and layout					
141.	Mechanical – Duct insulation (Prescriptive)					
142.	Mechanical – Duct sealing (Mandatory) – Sealing, joints and seams					
143.	Mechanical – Duct sealing (Mandatory) – Duct tightness test					
144.	Mechanical – Duct sealing (Mandatory) – Building cavities					
145.	Mechanical – Mechanical system piping insulation (Mandatory)					
146.	Mechanical – Mechanical ventilation (Mandatory)					
147.	Mechanical – Snow melt system controls (Mandatory)					
148.	Mechanical – Heating & cooling calculations; Equipment and system sizing	IECC C302.1; IECC403.2				
149.	Mechanical – HVAC equipment performance requirements	IECC C403.2.3				

Item #	Description of Deviation	Reference	Corrective Action Taken	Date Corrected
150.	Mechanical – Thermostatic zones (Mandatory)			
151.	Mechanical – Heat pump supplementary heat (Mandatory)			
152.	Mechanical – Set point overlap restriction (Mandatory)			
153.	Mechanical – Off-hour controls (Mandatory)			
154.	Mechanical – Shutoff damper controls (Mandatory)			
155.	Mechanical – Ventilation (Mandatory)			
156.	Mechanical – Energy recovery ventilation system (Mandatory)			
157.	Mechanical – Air system balancing (Mandatory)			
158.	Mechanical – Manuals (Mandatory)			
159.	Mechanical – Air system design and control (Mandatory)			
160.	Mechanical – Heating outside a building (Mandatory)			
161.	Mechanical – Simple HVAC systems and equipment			
162.	Mechanical – Complex HVAC systems and equipment			

B - PLAN	B – PLANS AND SPECIFICATIONS				
Item #	Description of Deviation	Reference	Corrective Action Taken	Date Corrected	
163.	Water Heating – Service water-heating equipment performance efficiency (Mandatory)				
	Water heater type and efficiency rating				
164.	Water Heating – Temperature controls (Mandatory)				
165.	Water Heating – Heat Traps (Mandatory)				
166.	Water Heating – Pipe Insulation (Mandatory)				
167.	Water Heating – Hot water system controls				
168.	Lighting requirements – Residential				
169.	Lighting – Lighting controls (Mandatory)				
170.	Lighting – Light reduction controls (Mandatory)				
171.	Lighting – Automatic lighting shutoff (Mandatory)				
172.	Lighting – Occupant override (Mandatory)				
173.	Lighting – Holiday scheduling (Mandatory)				
174.	Lighting – Daylight zone control (Mandatory)				
175.	Lighting – Sleeping unit controls (Mandatory)				
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B – PLAN	B – PLANS AND SPECIFICATIONS				
Item #	Description of Deviation	Reference	Corrective Action Taken	Date Corrected	
176.	Lighting –Exterior lighting controls (Mandatory)				
177.	Lighting – Tandem wiring (Mandatory)				
178.	Lighting – Exit signs (Mandatory)				
179.	Lighting – Total connected interior lighting power				
180.	Lighting – Exterior building lighting power (Mandatory)				
181.	Lighting – Electrical energy consumption (Mandatory)				
182.	On-site construction - Critical load points for attachment of the house or building or component to the foundation	Rule 70.70(d)(1)			
183.	On-site construction- Details for module to module or modular component assembly and connection	Rule 70.70(d)(2)			
184.	On-site construction- Minimum requirements for connection and attachment of all modules and modular components to the foundation system	Rule 70.70(d)(3)			
185.	On-site construction - Firestopping details	Rule 70.70(d)(4)			
186.	On-site construction - Draftstopping details	Rule 70.70(d)(4)			
187.	On-site construction - Details for fire exits	Rule 70.70(d)(5)			
188.	On-site construction - Details for balconies	Rule 70.70(d)(5)			
189.	On-site construction- Details for walkways	Rule 70.70(d)(5)			

B – PLAN	B – PLANS AND SPECIFICATIONS				
Item #	Description of Deviation	Reference	Corrective Action Taken	Date Corrected	
190.	On-site construction- Details for other site-built attachments	Rule 70.70(d)(5)			
191.	On-site construction - Exterior weatherproofing details	Rule 70.70(d)(6)			
192.	On-site construction- Details for thermal protection	Rule 70.70(d)(7)			
193.	On-site construction - Details for condensation protection	Rule 70.70(d)(7)			
194.	On-site construction - Details for decay protection				
		Rule 70.70(d)(7)			
195.	On-site construction - Details for corrosion protection				
		Rule 70.70(d)(7)			
196.	On-site construction - Details insect protection				
		Rule 70.70(d)(7)			
197.	On-site construction - Electrical system completion details	Rule 70.70(d)(8)			
198.	On-site construction - Mechanical system completion details	Rule 70.70(d)(8)			
199.	On-site construction - Heating system completion details	Rule 70.70(d)(8)			
200.	On-site construction- Cooling system completion details	Rule 70.70(d)(8)			
201.	On-site construction - Plumbing system completion details	Rule 70.70(d)(8)			
202.	On-site construction - Electrical system completion details test procedures	Rule 70.70(d)(9)			

B – PLANS AND SPECIFICATIONS					
Item #	Description of Deviation	Reference	Corrective Action Taken	Date Corrected	
203.	On-site construction Mechanical system completion details test procedures	Rule 70.70(d)(9)			
204.	On-site construction - Heating system completion details test procedures	Rule 70.70(d)(9)			
205.	On-site construction - Cooling system completion details test procedures	Rule 70.70(d)(9)			
206.	On-site construction - Plumbing system completion details test procedures	Rule 70.70(d)(9)			
207.	On-site construction - Fire safety provisions	Rule 70.70(d)(10)			
208.	On-site construction- Specifications for cooling equipment, and complete information necessary to calculate sensible heat gain along with information on the sizing of the air distribution system, if applicable, and the R values of insulation in the ceiling, walls, and floors.	Rule 70.70(d)(11)			
209.	On-site construction- Instructions for cooling equipment, and complete information necessary to calculate sensible heat gain along with information on the sizing of the air distribution system, if applicable, and the R values of insulation in the ceiling, walls, and floors.	Rule 70.70(d)(11)			