



EQUITONE General Load Tables

1.0 PRODUCT DESCRIPTION

The EQUITONE system consists of high-density durable fiber cement panels that are supported by a variety of subframing systems. These panels vary in size, texture, and color but are all manufactured from fiber cement material. The panel types selected to be analyzed in these tables were the EQUITONE [natura] panel and the EQUITONE [tectiva] panel. EQUITONE [natura] is an 8mm or 12mm thick air-cured panel with an acrylic coating for a matte, smooth finish. EQUITONE [tectiva] is an 8mm or 10mm thick autoclaved panel with sanded lines for a natural finish. Their typical application is as a rainscreen façade system where the panels attach to a subframing system behind. This subframing system may vary by application and is not included within the scope of these tables other than to account for local effects at the EQUITONE fasteners.

The fastening systems included in this report are stainless steel and aluminum UNI-Rivets, stainless steel UNI-Metal Screws, Stainless Steel UNI-Wood Screws.

2.0 Wind Load

Wind load on the Equitone panel system is the primary cause of panel stress and deflection, as well as tensile loads on the fasteners. The panel and attachment schemes were analyzed at various wind pressure increments – 10psf, 15psf, 20psf, 30psf, 40psf, 50psf, 60psf, 70psf, and 80psf (service level wind loadings). Using finite element modeling software, multispan and single span cases were modeled by the Larsen Engineering Group with variables for panel type, fastener type, and wind pressure. Dead load points for UNI-Rivets and UNI-Screws were modeled as fixed points.

3.0 LOAD SPAN TABLES

3.1 [natura] Panel with UNI-Rivets (Aluminum Substrate)

8MM NATURA - UNI RIVET					
WIND LOAD (PSF)		MULTI-SPAN		SINGLE SPAN	
ASD	LRFD	SPAN 1 (IN)	SPAN 2 (IN)	SPAN 1 (IN)	SPAN 2 (IN)
10	16.6	24	24	24	24
15	25	24	24	24	22
20	33.3	24	22	24	16
30	50	22	16	20	16
40	66.6	20	16	18	16
50	83.3	20	12	18	12
60	100	18	12	16	14
70	116.6	18	10	16	10
80	133.3	16	12	14	14

1. For either internal or external applications the maximum fastener spacing for wall assemblies should be 24" O.C. while soffits should be 16" O.C.
2. Panel deflection limit: L/300. A factor of 0.7 has been applied to ASD wind load deflections in accordance with Table 1604.3, Note f of the 2021 International Building Code (IBC).
3. For UNI-Rivets, fastener distance from center of anchor to a panel edge parallel to subframing to be 4" maximum & 1 3/16" minimum.
4. For UNI-Rivets, fastener distance from center of anchor to a panel edge perpendicular to subframing to be 4" maximum & 2 3/4" minimum.
5. Panel load tables are calculated with anchorage into 1.8mm thick 6063-T5 aluminum.
6. Fasteners are assumed to be 4.0x18 K15 stainless steel or aluminum UNI-Rivets (4mm minimum diameter).
7. Span 1 and Span 2 fastener spacings can be interchanged horizontally and vertically.
8. The performance of the installed system is dependent on the structural adequacy of the subframing which supports the panels and is beyond the scope of this table.
9. The use of these tables may not guarantee full compliance with specific project specifications or local code requirements. A qualified professional should be consulted to certify full conformance with project specific requirements. Larson Engineering and Etex Group assumes no responsibility or liability associated with the use of this table for project specific conditions.

3.2 [natura] Panel with UNI-Rivets (Steel Substrate)

8MM NATURA - UNI RIVET					
WIND LOAD (PSF)		MULTI-SPAN		SINGLE SPAN	
ASD	LRFD	SPAN 1 (IN)	SPAN 2 (IN)	SPAN 1 (IN)	SPAN 2 (IN)
10	16.6	24	24	24	24
15	25	24	24	24	22
20	33.3	24	22	24	16
30	50	22	16	20	16
40	66.6	20	16	18	16
50	83.3	20	12	18	12
60	100	18	12	16	14
70	116.6	18	10	16	10
80	133.3	16	12	14	14

1. For either internal or external applications the maximum fastener spacing for wall assemblies should be 24" O.C. while soffits should be 16" O.C.
2. Panel deflection limit: L/300. A factor of 0.7 has been applied to ASD wind load deflections in accordance with Table 1604.3, Note f of the 2021 International Building Code (IBC).
3. For UNI-Rivets, fastener distance from center of anchor to a panel edge parallel to subframing to be 4" maximum & 1 3/16" minimum.
4. For UNI-Rivets, fastener distance from center of anchor to a panel edge perpendicular to subframing to be 4" maximum & 2 3/4" minimum.
5. Panel load tables are calculated with anchorage into 18ga (43mil) light gauge steel with a minimum yield strength of 33ksi.
6. Fasteners are assumed to be 4.0x18 K15 stainless steel UNI-Rivets (4mm minimum diameter).
7. Span 1 and Span 2 fastener spacings can be interchanged horizontally and vertically.
8. The performance of the installed system is dependent on the structural adequacy of the subframing which supports the panels and is beyond the scope of this table.
9. The use of these tables may not guarantee full compliance with specific project specifications or local code requirements. A qualified professional should be consulted to certify full conformance with project specific requirements. Larson Engineering and Etex Group assumes no responsibility or liability associated with the use of this table for project specific conditions.

3.3 [natura] Panel with UNI-Screws (Aluminum Substrate)

8MM NATURA - UNI SCREW FOR METAL					
WIND LOAD (PSF)		MULTI-SPAN		SINGLE SPAN	
ASD	LRFD	SPAN 1 (IN)	SPAN 2 (IN)	SPAN 1 (IN)	SPAN 2 (IN)
10	16.6	24	24	24	24
15	25	24	24	24	22
20	33.3	24	22	24	16
30	50	22	16	20	16
40	66.6	20	16	18	16
50	83.3	20	12	18	12
60	100	18	12	16	14
70	116.6	18	10	16	10
80	133.3	16	12	14	14

1. For either internal or external applications the maximum fastener spacing for wall assemblies should be 24" O.C. while soffits should be 16" O.C.
2. Panel deflection limit: L/300. A factor of 0.7 has been applied to ASD wind load deflections in accordance with Table 1604.3, Note f of the 2021 International Building Code (IBC).
3. For UNI-Screws, fastener distance from center of anchor to a panel edge parallel to subframing to be 4" maximum & 1 3/16" minimum.
4. For UNI-Screws, fastener distance from center of anchor to a panel edge perpendicular to subframing to be 4" maximum & 2 3/4" minimum.
5. Panel load tables are calculated with anchorage into 1.8mm thick 6063-T5 aluminum.
6. Fasteners are assumed to be 5.8x35 stainless steel UNI-Screws for metal (5.8mm minimum diameter).
7. Span 1 and Span 2 fastener spacings can be interchanged horizontally and vertically.
8. The performance of the installed system is dependent on the structural adequacy of the subframing which supports the panels and is beyond the scope of this table.
9. The use of these tables may not guarantee full compliance with specific project specifications or local code requirements. A qualified professional should be consulted to certify full conformance with project specific requirements. Larson Engineering and Etex Group assumes no responsibility or liability associated with the use of this table for project specific conditions.

3.4 [natura] Panel with UNI-Screws (Steel Substrate)

8MM NATURA - UNI SCREW FOR METAL					
WIND LOAD (PSF)		MULTI-SPAN		SINGLE SPAN	
ASD	LRFD	SPAN 1 (IN)	SPAN 2 (IN)	SPAN 1 (IN)	SPAN 2 (IN)
10	16.6	24	24	24	24
15	25	24	24	24	22
20	33.3	24	22	24	16
30	50	22	16	20	16
40	66.6	20	16	18	16
50	83.3	20	12	18	12
60	100	18	12	16	14
70	116.6	18	10	16	10
80	133.3	16	12	14	14

1. For either internal or external applications the maximum fastener spacing for wall assemblies should be 24" O.C. while soffits should be 16" O.C.
2. Panel deflection limit: L/300. A factor of 0.7 has been applied to ASD wind load deflections in accordance with Table 1604.3, Note f of the 2021 International Building Code (IBC).
3. For UNI-Screws, fastener distance from center of anchor to a panel edge parallel to subframing to be 4" maximum & 1 3/16" minimum.
4. For UNI-Screws, fastener distance from center of anchor to a panel edge perpendicular to subframing to be 4" maximum & 2 3/4" minimum.
5. Panel load tables are calculated with anchorage into 18ga (43mil) light gauge steel with a minimum yield strength of 33ksi.
6. Fasteners are assumed to be 5.8x35 stainless steel UNI-Screws for metal (5.8mm minimum diameter).
7. Span 1 and Span 2 fastener spacings can be interchanged horizontally and vertically.
8. The performance of the installed system is dependent on the structural adequacy of the subframing which supports the panels and is beyond the scope of this table.
9. The use of these tables may not guarantee full compliance with specific project specifications or local code requirements. A qualified professional should be consulted to certify full conformance with project specific requirements. Larson Engineering and Etex Group assumes no responsibility or liability associated with the use of this table for project specific conditions.

3.5 [natura] Panel with UNI-Screws (Wood Substrate)

8MM NATURA - UNI SCREW FOR WOOD					
WIND LOAD (PSF)		MULTI-SPAN		SINGLE SPAN	
ASD	LRFD	SPAN 1 (IN)	SPAN 2 (IN)	SPAN 1 (IN)	SPAN 2 (IN)
10	16.6	24	24	24	24
15	25	24	24	24	22
20	33.3	24	22	24	16
30	50	22	16	20	16
40	66.6	20	16	18	16
50	83.3	20	12	18	12
60	100	18	12	16	14
70	116.6	18	10	16	10
80	133.3	16	12	14	14

1. For either internal or external applications the maximum fastener spacing for wall assemblies should be 24" O.C. while soffits should be 16" O.C.
2. Panel deflection limit: L/300. A factor of 0.7 has been applied to ASD wind load deflections in accordance with Table 1604.3, Note f of the 2021 International Building Code (IBC).
3. For UNI-Screws, fastener distance from center of anchor to a panel edge parallel to subframing to be 4" maximum & 1 3/16" minimum.
4. For UNI-Screws, fastener distance from center of anchor to a panel edge perpendicular to subframing to be 4" maximum & 2 3/4" minimum.
5. Panel load tables are calculated with 26mm (1-1/32") minimum penetration into Spruce-Pine-Fir wood blocking with minimum specific gravity (G) of 0.42.
6. Fasteners are assumed to be 5.5x40 K15 stainless steel UNI-Screws for wood (5.5mm minimum diameter).
7. Span 1 and Span 2 fastener spacings can be interchanged horizontally and vertically.
8. The performance of the installed system is dependent on the structural adequacy of the subframing which supports the panels and is beyond the scope of this table.
9. The use of these tables may not guarantee full compliance with specific project specifications or local code requirements. A qualified professional should be consulted to certify full conformance with project specific requirements. Larson Engineering and Etex Group assumes no responsibility or liability associated with the use of this table for project specific conditions.

3.6 [tectiva] Panel with UNI-Rivets (Aluminum Substrate)

8MM TECTIVA - UNI RIVET					
WIND LOAD (PSF)		MULTI-SPAN		SINGLE SPAN	
ASD	LRFD	SPAN 1 (IN)	SPAN 2 (IN)	SPAN 1 (IN)	SPAN 2 (IN)
10	16.6	24	24	24	24
15	25	24	24	24	24
20	33.3	24	24	24	20
30	50	24	18	22	16
40	66.6	22	14	20	16
50	83.3	20	14	18	16
60	100	18	14	18	12
70	116.6	18	12	16	14
80	133.3	18	10	16	10

1. For either internal or external applications the maximum fastener spacing for wall assemblies should be 24" O.C. while soffits should be 16" O.C.
2. Panel deflection limit: L/300. A factor of 0.7 has been applied to ASD wind load deflections in accordance with Table 1604.3, Note f of the 2021 International Building Code (IBC).
3. For UNI-Rivets, fastener distance from center of anchor to a panel edge parallel to subframing to be 4" maximum & 1 3/16" minimum.
4. For UNI-Rivets, fastener distance from center of anchor to a panel edge perpendicular to subframing to be 4" maximum & 2 3/4" minimum.
5. Panel load tables are calculated with anchorage into 1.8mm thick 6063-T5 aluminum.
6. Fasteners are assumed to be 4.0x18 K15 stainless steel or aluminum UNI-Rivets (4mm minimum diameter).
7. Span 1 and Span 2 fastener spacings can be interchanged horizontally and vertically.
8. The performance of the installed system is dependent on the structural adequacy of the subframing which supports the panels and is beyond the scope of this table.
9. The use of these tables may not guarantee full compliance with specific project specifications or local code requirements. A qualified professional should be consulted to certify full conformance with project specific requirements. Larson Engineering and Etex Group assumes no responsibility or liability associated with the use of this table for project specific conditions.

3.7 [tectiva] Panel with UNI-Rivets (Steel Substrate)

8MM TECTIVA - UNI RIVET					
WIND LOAD (PSF)		MULTI-SPAN		SINGLE SPAN	
ASD	LRFD	SPAN 1 (IN)	SPAN 2 (IN)	SPAN 1 (IN)	SPAN 2 (IN)
10	16.6	24	24	24	24
15	25	24	24	24	24
20	33.3	24	24	24	20
30	50	24	18	22	16
40	66.6	22	14	20	16
50	83.3	20	14	18	16
60	100	18	14	18	12
70	116.6	18	12	16	14
80	133.3	18	10	16	10

1. For either internal or external applications the maximum fastener spacing for wall assemblies should be 24" O.C. while soffits should be 16" O.C.
2. Panel deflection limit: L/300. A factor of 0.7 has been applied to ASD wind load deflections in accordance with Table 1604.3, Note f of the 2021 International Building Code (IBC).
3. For UNI-Rivets, fastener distance from center of anchor to a panel edge parallel to subframing to be 4" maximum & 1 3/16" minimum.
4. For UNI-Rivets, fastener distance from center of anchor to a panel edge perpendicular to subframing to be 4" maximum & 2 3/4" minimum.
5. Panel load tables are calculated with anchorage into 18ga (43mil) light gauge steel with a minimum yield strength of 33ksi.
6. Fasteners are assumed to be 4.0x18 K15 stainless steel UNI-Rivets (4mm minimum diameter).
7. Span 1 and Span 2 fastener spacings can be interchanged horizontally and vertically.
8. The performance of the installed system is dependent on the structural adequacy of the subframing which supports the panels and is beyond the scope of this table.
9. The use of these tables may not guarantee full compliance with specific project specifications or local code requirements. A qualified professional should be consulted to certify full conformance with project specific requirements. Larson Engineering and Etex Group assumes no responsibility or liability associated with the use of this table for project specific conditions.

3.8 [tectiva] Panel with UNI-Screws (Aluminum Substrate)

8MM TECTIVA - UNI SCREW FOR METAL					
WIND LOAD (PSF)		MULTI-SPAN		SINGLE SPAN	
ASD	LRFD	SPAN 1 (IN)	SPAN 2 (IN)	SPAN 1 (IN)	SPAN 2 (IN)
10	16.6	24	24	24	24
15	25	24	24	24	24
20	33.3	24	24	24	20
30	50	24	18	22	16
40	66.6	22	14	20	16
50	83.3	20	14	18	16
60	100	18	14	18	12
70	116.6	18	12	16	14
80	133.3	18	10	16	10

1. For either internal or external applications the maximum fastener spacing for wall assemblies should be 24" O.C. while soffits should be 16" O.C.
2. Panel deflection limit: L/300. A factor of 0.7 has been applied to ASD wind load deflections in accordance with Table 1604.3, Note f of the 2021 International Building Code (IBC).
3. For UNI-Screws, fastener distance from center of anchor to a panel edge parallel to subframing to be 4" maximum & 1 3/16" minimum.
4. For UNI-Screws, fastener distance from center of anchor to a panel edge perpendicular to subframing to be 4" maximum & 2 3/4" minimum.
5. Panel load tables are calculated with anchorage into 1.8mm thick 6063-T5 aluminum.
6. Fasteners are assumed to be 5.8x35 stainless steel UNI-Screws for metal (5.8mm minimum diameter).
7. Span 1 and Span 2 fastener spacings can be interchanged horizontally and vertically.
8. The performance of the installed system is dependent on the structural adequacy of the subframing which supports the panels and is beyond the scope of this table.
9. The use of these tables may not guarantee full compliance with specific project specifications or local code requirements. A qualified professional should be consulted to certify full conformance with project specific requirements. Larson Engineering assumes no responsibility or liability associated with the use of this table for project specific conditions.

3.9 [tectiva] Panel with UNI-Screws (Steel Substrate)

8MM TECTIVA - UNI SCREW FOR METAL					
WIND LOAD (PSF)		MULTI-SPAN		SINGLE SPAN	
ASD	LRFD	SPAN 1 (IN)	SPAN 2 (IN)	SPAN 1 (IN)	SPAN 2 (IN)
10	16.6	24	24	24	24
15	25	24	24	24	24
20	33.3	24	24	24	20
30	50	24	18	22	16
40	66.6	22	14	20	16
50	83.3	20	14	18	16
60	100	18	14	18	12
70	116.6	18	12	16	14
80	133.3	18	10	16	10

1. For either internal or external applications the maximum fastener spacing for wall assemblies should be 24" O.C. while soffits should be 16" O.C.
2. Panel deflection limit: L/300. A factor of 0.7 has been applied to ASD wind load deflections in accordance with Table 1604.3, Note f of the 2021 International Building Code (IBC).
3. For UNI-Screws, fastener distance from center of anchor to a panel edge parallel to subframing to be 4" maximum & 1 3/16" minimum.
4. For UNI-Screws, fastener distance from center of anchor to a panel edge perpendicular to subframing to be 4" maximum & 2 3/4" minimum.
5. Panel load tables are calculated with anchorage into 18ga (43mil) light gauge steel with a minimum yield strength of 33ksi.
6. Fasteners are assumed to be 5.8x35 stainless steel UNI-Screws for metal (5.8mm minimum diameter).
7. Span 1 and Span 2 fastener spacings can be interchanged horizontally and vertically.
8. The performance of the installed system is dependent on the structural adequacy of the subframing which supports the panels and is beyond the scope of this table.
9. The use of these tables may not guarantee full compliance with specific project specifications or local code requirements. A qualified professional should be consulted to certify full conformance with project specific requirements. Larson Engineering and Etex Group assumes no responsibility or liability associated with the use of this table for project specific conditions.

3.10 [tectiva] Panel with UNI-Screws (Wood Substrate)

8MM TECTIVA - UNI SCREW FOR WOOD					
WIND LOAD (PSF)		MULTI-SPAN		SINGLE SPAN	
ASD	LRFD	SPAN 1 (IN)	SPAN 2 (IN)	SPAN 1 (IN)	SPAN 2 (IN)
10	16.6	24	24	24	24
15	25	24	24	24	24
20	33.3	24	24	24	20
30	50	24	18	22	16
40	66.6	22	14	20	16
50	83.3	20	14	18	16
60	100	18	14	18	12
70	116.6	18	12	16	14
80	133.3	18	10	16	10

1. For either internal or external applications the maximum fastener spacing for wall assemblies should be 24" O.C. while soffits should be 16" O.C.
2. Panel deflection limit: L/300. A factor of 0.7 has been applied to ASD wind load deflections in accordance with Table 1604.3, Note f of the 2021 International Building Code (IBC).
3. For UNI-Screws, fastener distance from center of anchor to a panel edge parallel to subframing to be 4" maximum & 1 3/16" minimum.
4. For UNI-Screws, fastener distance from center of anchor to a panel edge perpendicular to subframing to be 4" maximum & 2 3/4" minimum.
5. Panel load tables are calculated with anchorage into 18ga (43mil) light gauge steel with a minimum yield strength of 33ksi.
6. Fasteners are assumed to be 5.8x35 stainless steel UNI-Screws for metal (5.8mm minimum diameter).
7. Span 1 and Span 2 fastener spacings can be interchanged horizontally and vertically.
8. The performance of the installed system is dependent on the structural adequacy of the subframing which supports the panels and is beyond the scope of this table.
9. The use of these tables may not guarantee full compliance with specific project specifications or local code requirements. A qualified professional should be consulted to certify full conformance with project specific requirements. Larson Engineering and Etex Group assumes no responsibility or liability associated with the use of this table for project specific conditions.

Contact :

 www.equitone.com

USA/Canada

1731 Fred Lawson Dr. Maryville TN, 37801

Tel: +1 865 268 0654

E-mail: info.usa@equitone.com<http://www.equitone.com/en-us/><http://www.equitone.com/en-ca/>

Disclaimer

The information in this document is correct at time issuing. However, due to our committed program of continuous material and system development we reserve the right to amend or alter the information contained therein without prior notice. Please visit www.equitone.com to ensure you have the most current version. All figures contained in this document are illustrations and should not be used as construction drawings. This information is supplied in good faith and no liability can be accepted for any loss or damage resulting from its use. This document is protected by international copyright laws. Reproduction and distribution in whole or in part without prior written permission is strictly prohibited. EQUITONE and logos are trademarks of Etex NV or an affiliate thereof. Any use without authorisation is strictly prohibited and may violate trademark laws.

 www.equitone.com