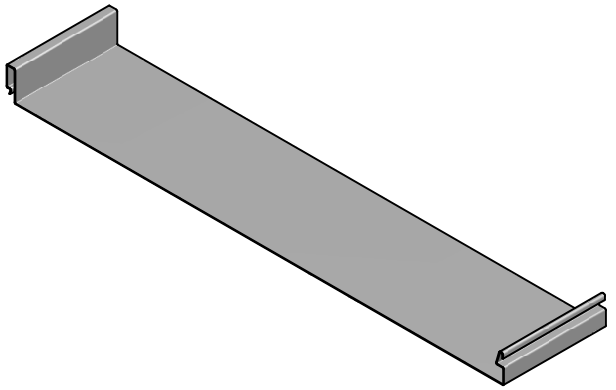
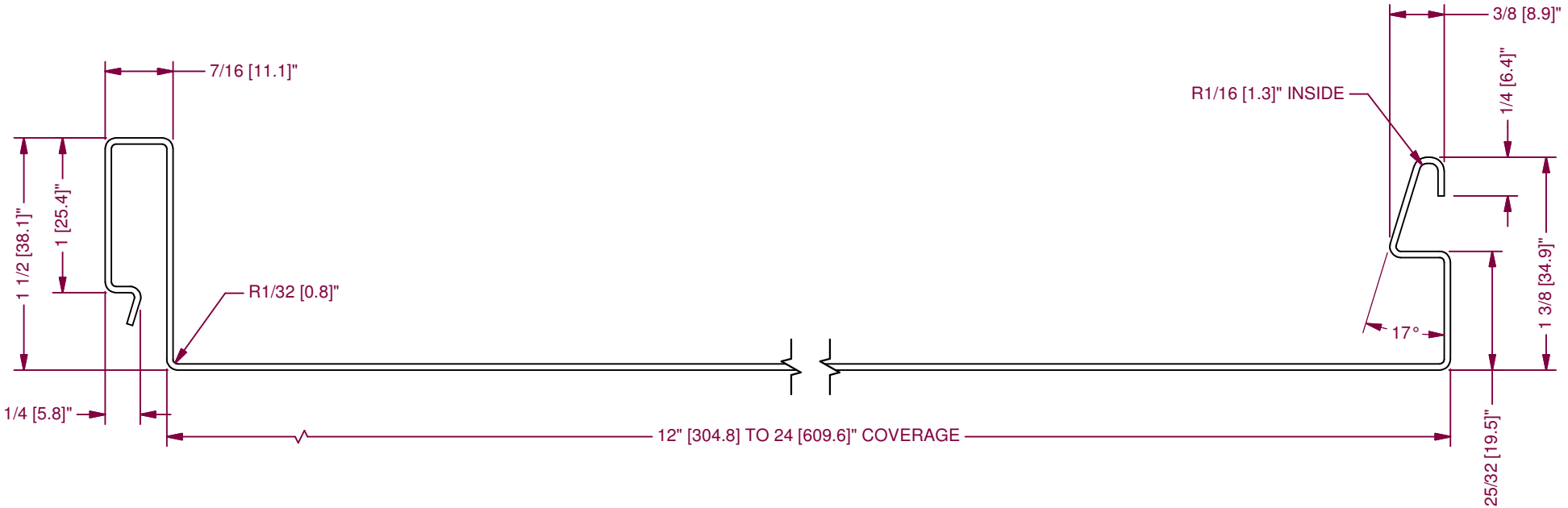





NOTE:
1. MATERIAL USAGE: 5-1/8" [130.2]
2. DUAL DIMENSIONS: Inch [mm]

| | | | | |
|---|---|---|---|---|
| MATERIAL: PAINTED STEEL/PAINTED ALUMINUM/COPPER | | | FINISH: NONE | |
| REVISION HISTORY | REV | ECR NO. | DATE | RELEASED BY |
| | 1 | ADDED mm | 05/02/2012 | JD |

TOLERANCES
.XX = ± .01
.XXX = ± .005
FRACTION = ± 1/32"
ANGLE = ± 1/2°

| | |
|---|---|
| DRAWN BY | GDP |
| DATE | 12-07-2009 |
| CHECK BY | JD |
| DATE | 05/02/2012 |

**NEW TECH MACHINERY CORP.**

PART NAME: SS550 PANEL PROFILE

PART NUMBER: SS5-550P

SHEET: 1 OF 1

REVISION: 1

# PANEL SS550

## DESCRIPTION

PRODUCT COVERED

This section of the procedure covers a steel roof panel which is identified as "Panel SS550." The panel is produced at the job sites by portable rolling machines
The panel is roll formed from No. 24 MSG minimum gauge coated steel to the configuration Shown in ILL. 1. The panel may also have a paint over coating.
The Report included in this Procedure, following this section, is to be examined for comparison with copies of the Report in stock. The Report issue date is November 13, 1997.

SPECIFICATION OF FINISHED PRODUCT

THICKNESS

The base metal thickness if the steel used in the fabrication of the panel shall be not less than .0225 in. (No. 23 MSG minimum gauge). This thickness shall not include the coating or any paint finish.

DIMENSIONS

The cross-section dimensions of the panel shall be in accordance with the cross-section shown In ILL. 1.

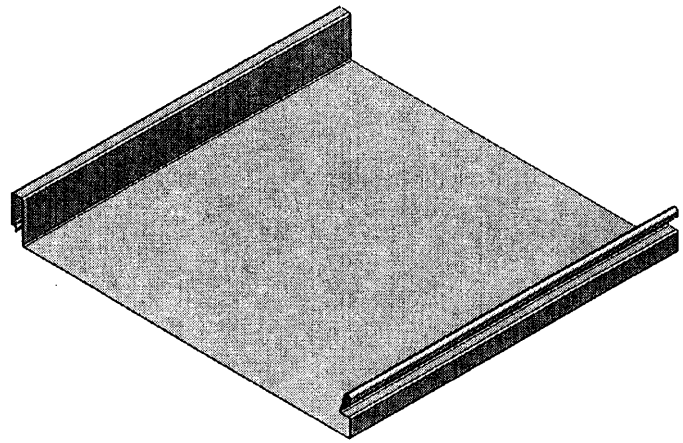
STRENGTH

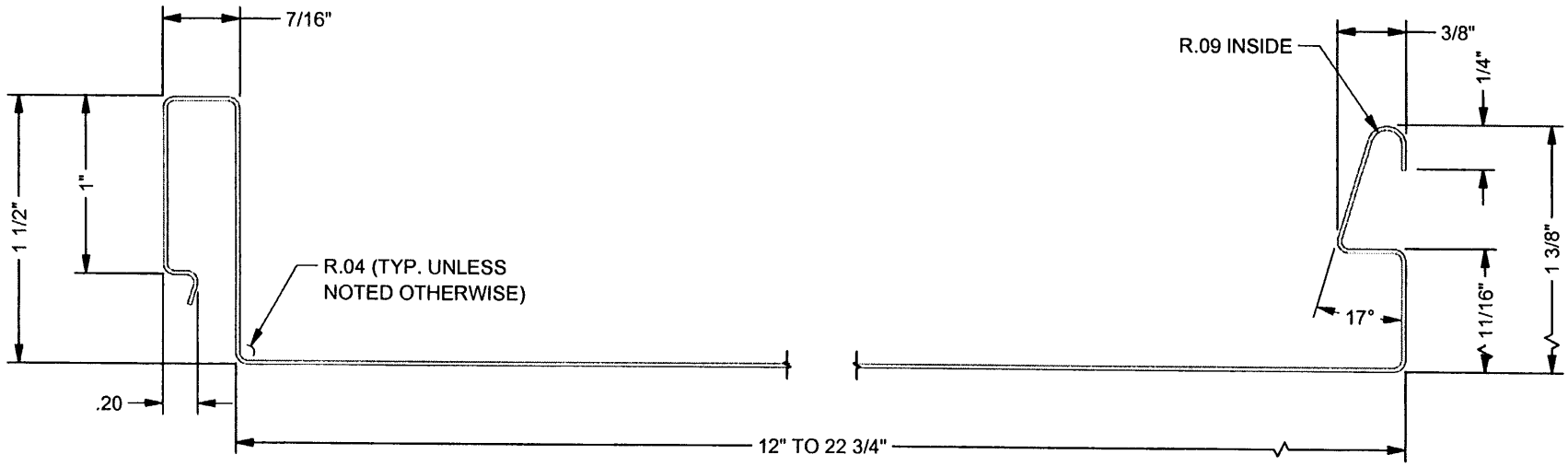
The strength records of the steel shall be reviewed. The steel used shall conform to ASTM A653 Grade 50 specifications or the minimum yield point of the steel shall be 50,000 psi.

Listed Construction Numbers

#373

1300 40th • Denver, CO 80205-3311 • Phone 303-294-0538 • 800-574-1717 • Fax 303-294-9407






**NOTE:**
MATERIAL USAGE: 5 1/8"

| MATERIAL | LENGTH | FINISH |
|---|---|---|
| | | |

| REVISION HISTORY | REV | ECN NO. | DATE | RELEASED BY |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

TOLERANCES
.XX = ± .01
.XXX = ± .005
FRACTION = ± 1/32"
ANGLE = ± 1/2°

**NEW TECH MACHINERY CORP.**

| DRAWN BY | PART NAME | | |
|---|---|---|---|
| SAWYER | SS550 PANEL PROFILE | | |
| DATE 9/11/2002 | | | |
| CHECK BY | SIZE A | SHEET 1 OF 1 | REVISION 0 |
| DATE | SCALE FULL | PART NUMBER SS550 | |

Underwriters Laboratories Inc.®

333 Pfingsten Road
Northbrook, Illinois 60062-2096
(847) 272-8800
FAX No. (847) 272-8129
MCI Mail No. 254-3343
Telex No. 6502543343

100 a century of public safety est. 1894

File R14692
Project 97NK2305

November 12, 1997

CLASSIFICATION BY REPORT

of

METAL ROOF DECK PANEL AND ROOF DECK FASTENERS
IN ROOF DECK CONSTRUCTIONS

New Tech Machinery Corp.
Denver, CO

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JH:tjm
NKDLS

A not-for-profit organization dedicated to public safety and committed to quality service

## G E N E R A L

The subject of this Report is a Roof Deck Panel which is identified as "Snap Panel 550". The panel is used in Construction No. 373 as described in UL's Roofing Materials and Systems Directory. In addition to the roof deck panel, the construction utilized steel purlins, Classified panel clip and screw fasteners.

The panel in this Report was previously Classified for New Tech Machinery Corp. by Underwriters Laboratories Inc. for the same construction number. The panel was identified previously as "12 in. 550 Sure-Lock Snap". The panel in this Report is the same as previously Classified.

The roof deck panel is roll-formed at the construction site. Therefore, the information provided in this Report replaces the Laboratories' usual factory Follow-Up Service Program for metal roof deck panels for which Follow-Up Service is normally conducted at the point of manufacture. The program for companies that are "Classified by Report" consists of keeping supplies of up-to-date Reports that are to be distributed to any interested party and requiring the roll forming machines to be covered by the Underwriters Laboratories Inc. Certificate Service.

The roof deck panel clip is covered by the usual Follow-Up Service Program of Underwriters Laboratories Inc. with factory monitored quality control. The method of use and a description of the Classified panel clip are shown in the Roof Deck Construction.

# D E S C R I P T I O N

Metal Roof Deck Panels - The roof deck panel is 12 in. wide and 1-1/2 in. high at the female rib. The panel is fabricated from coated steel having a minimum thickness of 0.0225 in. (No. 24 MSG) and a minimum yield strength of 50,000 psi (ASTM A653, Grade 50). The panel will be Classified as "Metal Roof Deck Panels" in Underwriters Laboratories Inc.'s Roofing Materials and Systems Directory and will be covered under our Follow-Up Service. The panel is designated as "Snap Panel 550" by the manufacturer and is shown in ILL. 1.

JH:tjm
NKDLS

# C O N C L U S I O N

The following conclusions represent the judgement of Underwriters Laboratories Inc., based upon the results of the examination presented in this Report as they relate to established principles and previously recorded data.

UPLIFT RESISTANCE:

The roof deck assembly constructed of the materials and in the manner described in Roof Deck Construction No. 373 will afford a Class 90 uplift resistance rating based on the method of test.

Secondary supports (beams, purlins, joists, bulb tees, lateral bracing, etc.), connections of these assemblies to the main structural members (girders, columns, etc.), and construction details along the edges of the roof or around roof openings (mechanical equipment, chimneys, etc.) have not been evaluated.

PRACTICABILITY:

The materials used in the assembly can be readily installed by qualified workmen with tools and methods commonly used for construction work of a similar nature.

The materials and installation procedures for the original test assembly described in this test were judged to be significant factors in the uplift resistance of the construction.

CONFORMITY:

The original assembly was tested in accordance with the Standard UL 580, entitled "Tests For Uplift Resistance Of Roof Assemblies."

JH:tjm
NKDLS

CLASSIFICATION AND FOLLOW-UP SERVICE:

The roof deck panel, as described herein, is judged to be eligible for Classification and Follow-Up Service of Underwriters Laboratories Inc. Under the Service, the manufacturer is authorized to use the Laboratories' Certification of Classification on the forming machine to produce products which comply with the fabrication specifications in this Report, as shown by ILL. 1, and any other applicable requirements of Underwriters Laboratories Inc. Only those products which are produced with a Certified machine are considered as Classified by Underwriters Laboratories Inc.

In addition, UL Classification Report Reference No. R14692, Project 97NK2305, dated November 12, 1997, should be consulted for compliance with material specifications and metal panel design.

See UL Roofing Materials and Systems Directory

Report by:

James Hatcher (tjm)

JAMES HATCHER
Staff Engineer

Reviewed by:

Kenneth Rhodes (tjm)

KENNETH RHODES
Associate Managing Engineer

JH:tjm
NKDLS

File R14692

Guide TGKX
Roof Deck Constructions

November 12, 1997

Construction No. 373

1. Metal Roof Deck Panels* - No. 24 MSG min. thickness, coated steel. Width 12 in. length at female rib 1-1/2 in. Panels continuous at two or more spans with no end laps. A bead of sealant may be used at panel side joints.

   New Tech Machinery Corp. - "Snap Panel 550"

2. Roof Deck Fasteners* - (Panel Clips) - One piece assembly, 0.033 in. min. thickness. Grade 408 or 304 stainless steel, 4 in. wide, 1-5/8 in. high. One panel clip located at each purlin intersection.

   U.S. Metals Corp. - "Snap Lock Clip - 550"

3. Panel Fasteners - (Screws) - Fasteners used for panel-clip-to-purlin attachment to be No. 10-16 by 9/16 in. long self-drilling, self-tapping, pancake head, No. 2 Phillips drive, No. 3 point, plated steel screws. Two screws per clip to be used, inserted through 1/4 in. diam guide holes.

4. Purlins - No. 16 MSG min. thickness steel (50,000 psi min. yield strength). Spacing to be 48 in. OC.

Refer to General Information, Roof Deck Construction (Roofing Materials and Systems Directory) for items not evaluated.

*Bearing the UL Classification Marking

JH:tjm
NKDLS

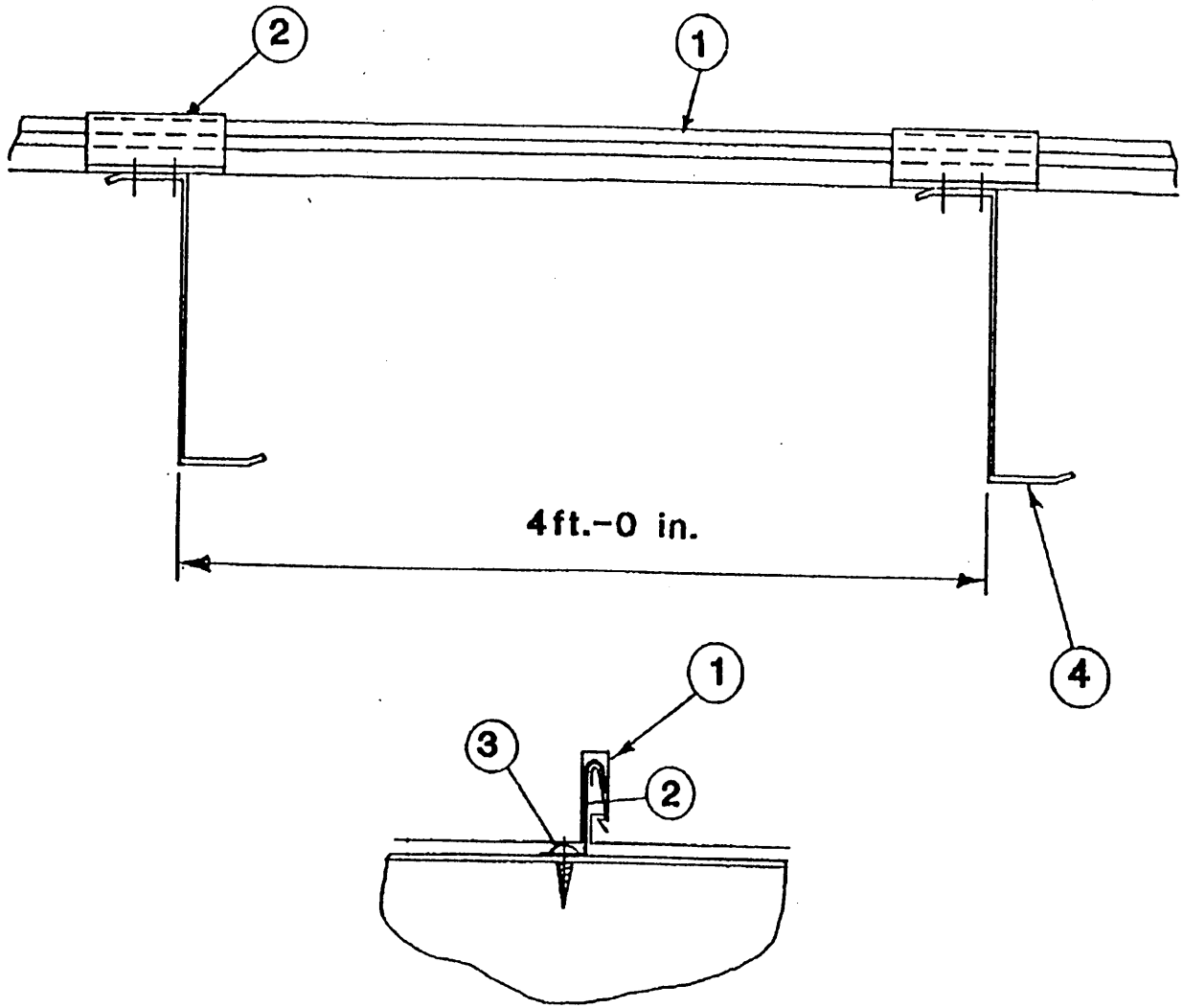
PART 1 - SEE PART 2 FOR DESCRIPTION OF NUMBERED ITEMS

ISSUED: 11-12-97
D373-A-CARD

# CONSTRUCTION NO. 373

UPLIFT - CLASS 90

FIRE NOT INVESTIGATED




R14692

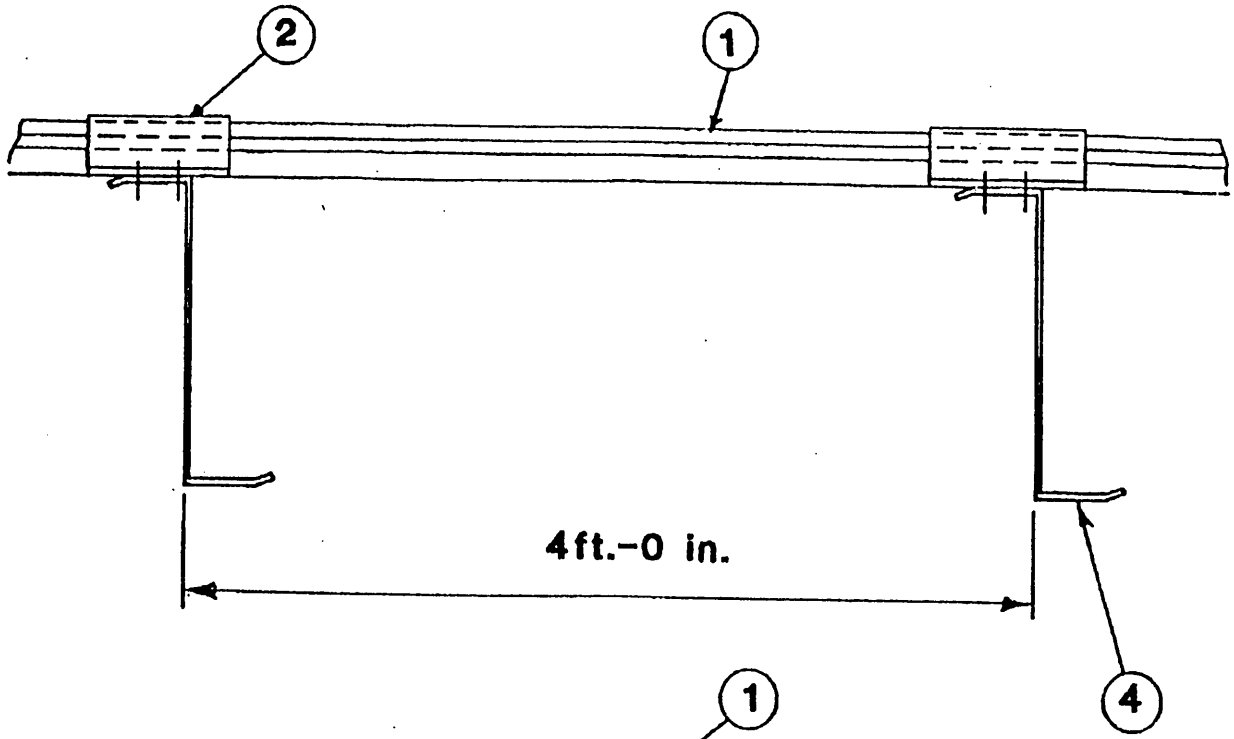
PART 1 - SEE PART 2 FOR DESCRIPTION OF NUMBERED ITEMS

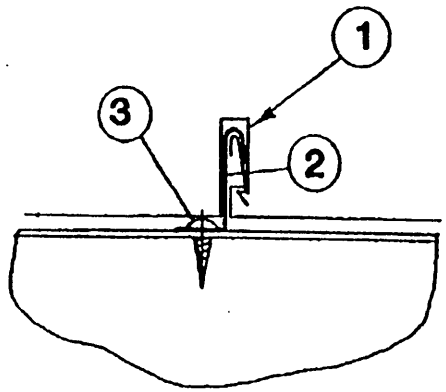
ISSUED: 11-12-97
D373-A1-CARD

# CONSTRUCTION NO. 373

UPLIFT - CLASS 90

FIRE NOT INVESTIGATED




R14692

# Section Analysis Report

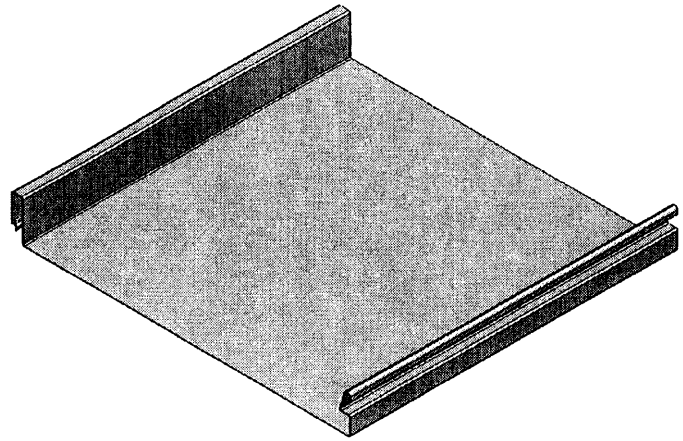
## SS550 PANEL

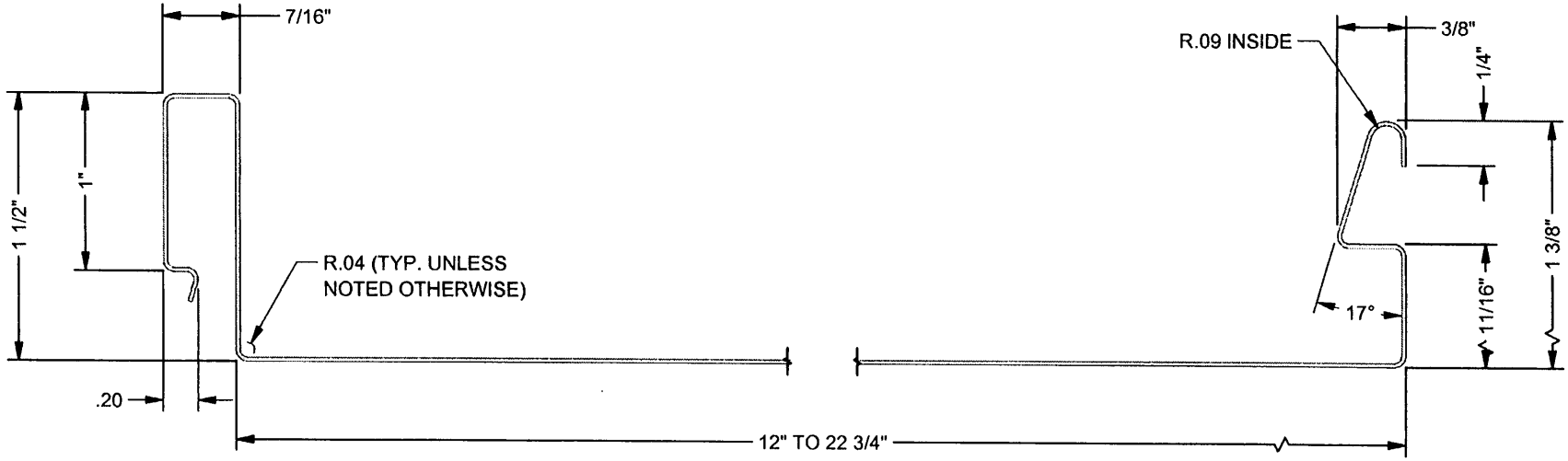
### PANEL ANALYSIS REPORT AND SPAN LOAD TABLES

Prepared For:
New Tech Machinery Corp.
1300 40th Street
Denver, CO 80205-3311

Prepared By:
John F. Butts & Associates, Inc.
2480 Vantage Drive
Colorado Springs, CO 80919

APRIL 22, 1999
JOB NO. 183-04






**NOTE:**
MATERIAL USAGE: 5 1/8"

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MATERIAL | | | LENGTH | FINISH | | NEW TECH MACHINERY CORP. | | |
| REVISION HISTORY | REV | ECN NO. | DATE | RELEASED BY | TOLERANCES<br>.XX = ± .01<br>.XXX = ± .005<br>FRACTION = ± 1/32"<br>ANGLE = ± 1/2° | DRAWN BY: SAWYER<br>DATE: 9/11/2002<br>CHECK BY<br>DATE | PART NAME: SS550 PANEL PROFILE<br>SIZE: A<br>SCALE: FULL | SHEET: 1 OF 1<br>PART NUMBER: SS550 | REVISION: 0 |

JFBA

JOHN F. BUTTS & ASSOC., INC.

CONSULTING ENGINEERS
2480 VANTAGE DRIVE COLORADO SPRINGS, CO 80919
(719) 598-7666 FAX (719) 598-0258

April 22, 1999

New Tech Machinery Corporation
1300 40th Street
Denver, CO 80205-3311

Re: Panel Analysis Report
New Tech SS150 Panel
New Tech SS200 Panel
New Tech SS210-A Panel
New Tech SS550 Panel
New Tech SS675 Panel
JFBA Job No. 183-04

Gentlemen:

Per your request, we have completed an analysis of the above referenced panels. The panels, with the structural properties indicated in this report, is certified to meet or exceed the requirements of the following design specifications:

> American Iron and Steel Institute, *Specifications for the Design of Cold-Formed Steel Structural Members,* 1996 edition.

The following documents are enclosed for your records:

> Panel cross-section
> Panel analysis, pages 1 to 183
> Panel Span Load tables, pages S1 to S71

Panels widths greater than 14 inches exceed the AISI allowable ratios for the panel width element. The AISI specifications, Section B1.1(a) states:

> "...stiffened elements having w/t ratios larger than 500 can be used with adequate design strength to sustain the required loads; however; substantial deformations of such elements usually will invalidate the design equations of this specification."

Before using the enclosed panel span tables, you will need to review the analysis reports for each panel. It is our opinion that the panels with w/t ratio elements exceeding 500 should be verified by testing before using the respective panel span tables.

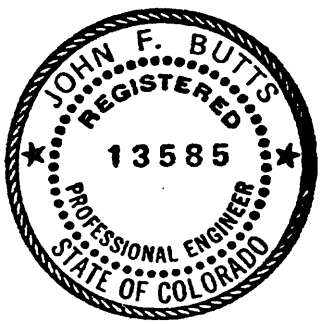
Please note that the panel analysis and Load Tables have been evaluated based on the assumption that the proper bearing, side laps, end laps, bracing, anchorage and structural supports are being utilized in the member's installation. We do not certify the installation method, attachment and supporting materials.

If you have any questions, please call or write the undersigned.

Sincerely,

John F. Butts

John F. Butts, PE
President



## New Tech SS550 Snap Panel

| | |
|---|---|
| Width | 12.00 in |
| Alloy | ASTM A653, G50 (Fy= 50 ksi) |
| Gauge | 24 (0.024 in) |

ALLOWABLE STRENGTH DESIGN (ASD)
Wind Load Factor = 1.0
ALLOWABLE UNIFORM LOAD (PSF)
SPAN LENGTH (Feet)

| SPAN | DEFLECTION | 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.25 | 3.50 | 3.75 | 4.00 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | L/180 | 236 | 186 | 150 | 124 | 104 | 88 | 76 | 66 | 58 |
| | L/240 | 236 | 186 | 150 | 124 | 104 | 88 | 76 | 66 | 58 |
| | L/360 | 236 | 186 | 150 | 124 | 104 | 88 | 76 | 66 | 56 |
| 2 | L/180 | 236 | 186 | 150 | 124 | 104 | 88 | 76 | 66 | 58 |
| | L/240 | 236 | 186 | 150 | 124 | 104 | 88 | 76 | 66 | 58 |
| | L/360 | 236 | 186 | 150 | 124 | 104 | 88 | 76 | 66 | 58 |
| 3 | L/180 | 266 | 212 | 172 | 142 | 120 | 102 | 88 | 77 | 67 |
| | L/240 | 266 | 212 | 172 | 142 | 120 | 102 | 88 | 77 | 67 |
| | L/360 | 266 | 212 | 172 | 142 | 120 | 102 | 88 | 77 | 67 |

1. Formula's used in Load Tables for FLEXURE and DEFLECTION are:
   One Span - Mp= .125wl², Mn= .125wl², x= .0130wl^4/EI
   Two Span - Mp= .125wl², Mn= .096wl², x= .0092wl^4/EI
   Three Span - Mp= .080wl², Mn= .107wl², x= .0069wl^4/EI
   Modulas of Elasticity (E) = 29,500 ksi

2. Allowable uniform loads are determined per the following:
   a) Allowable Shear Stress (Fv) [AISI C3.2]
   b) Combined Bending and Shear [AISI C3.3]
   c) Combined Bending & Web Crippling [AISI C3.5]

3. Factors of Safety used to determine uniform loads:
   Ω (Bending) = 1.67
   Ω (Shear) = 1.67
   Ω (Web Crippling) = 1.85

4. Allowance has been made for member Dead Weight.

5. Minimum panel support bearing length = 2.00 in

6. Concentrated load = 150 lb at mid-span, load width = 4 in
   Simple Span : Max. Span = 4.433 ft (L/180)
   Two Span : Max. Span = 5.337 ft (L/180)
   Three Span +: Max. Span = 5.740 ft (L/180)

## New Tech SS550 Snap Panel

| | |
|---|---|
| Width | 12.00 in |
| Alloy | ASTM A653, G50 (Fy= 50 ksi) |
| Gauge | 24 (0.024 in) |

ALLOWABLE STRENGTH DESIGN (ASD)
Wind Load Factor = 1.0
ALLOWABLE UNIFORM LOAD (PSF)
SPAN LENGTH (Feet)

| SPAN | DEFLECTION | 4.25 | 4.50 | 4.75 | 5.00 | 5.25 | 5.50 | 5.75 | 6.00 | 6.25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | L/180 | 51 | 45 | 41 | 37 | 33 | 30 | 27 | 25 | 23 |
| | L/240 | 51 | 45 | 41 | 37 | 33 | 30 | 27 | 25 | 22 |
| | L/360 | 47 | 40 | 34 | 29 | 25 | 22 | 19 | 17 | 15 |
| 2 | L/180 | 51 | 45 | 41 | 37 | 33 | 30 | 27 | 25 | 23 |
| | L/240 | 51 | 45 | 41 | 37 | 33 | 30 | 27 | 25 | 23 |
| | L/360 | 51 | 45 | 41 | 37 | 33 | 30 | 27 | 24 | 21 |
| 3 | L/180 | 59 | 53 | 47 | 43 | 39 | 35 | 32 | 29 | 27 |
| | L/240 | 59 | 53 | 47 | 43 | 39 | 35 | 32 | 29 | 27 |
| | L/360 | 59 | 53 | 47 | 43 | 39 | 35 | 32 | 29 | 27 |

1. Formula's used in Load Tables for FLEXURE and DEFLECTION are:
   One Span - Mp= .125wl², Mn= .125wl², x= .0130wl^4/EI
   Two Span - Mp= .125wl², Mn= .096wl², x= .0092wl^4/EI
   Three Span - Mp= .080wl², Mn= .107wl², x= .0069wl^4/EI
   Modulas of Elasticity (E) = 29,500 ksi

2. Allowable uniform loads are determined per the following:
   a) Allowable Shear Stress (Fv) [AISI C3.2]
   b) Combined Bending and Shear [AISI C3.3]
   c) Combined Bending & Web Crippling [AISI C3.5]

3. Factors of Safety used to determine uniform loads:
   Ω (Bending) = 1.67
   Ω (Shear) = 1.67
   Ω (Web Crippling) = 1.85

4. Allowance has been made for member Dead Weight.

5. Minimum panel support bearing length = 2.00 in

6. Concentrated load = 150 lb at mid-span, load width = 4 in
   Simple Span : Max. Span = 4.433 ft (L/180)
   Two Span : Max. Span = 5.337 ft (L/180)
   Three Span +: Max. Span = 5.740 ft (L/180)

## New Tech SS550 Snap Panel

| | |
|---|---|
| Width | 14.00 in |
| Alloy | ASTM A653, G50 (Fy= 50 ksi) |
| Gauge | 24 (0.024 in) |

ALLOWABLE STRENGTH DESIGN (ASD)
Wind Load Factor = 1.0
ALLOWABLE UNIFORM LOAD (PSF)

| SPAN | DEFLECTION | SPAN LENGTH (Feet) 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.25 | 3.50 | 3.75 | 4.00 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | L/180 | 202 | 159 | 129 | 106 | 89 | 76 | 65 | 57 | 50 |
| | L/240 | 202 | 159 | 129 | 106 | 89 | 76 | 65 | 57 | 50 |
| | L/360 | 202 | 159 | 129 | 106 | 89 | 76 | 65 | 57 | 47 |
| 2 | L/180 | 202 | 159 | 129 | 106 | 89 | 76 | 65 | 57 | 50 |
| | L/240 | 202 | 159 | 129 | 106 | 89 | 76 | 65 | 57 | 50 |
| | L/360 | 202 | 159 | 129 | 106 | 89 | 76 | 65 | 57 | 50 |
| 3 | L/180 | 228 | 181 | 147 | 122 | 103 | 87 | 75 | 66 | 58 |
| | L/240 | 228 | 181 | 147 | 122 | 103 | 87 | 75 | 66 | 58 |
| | L/360 | 228 | 181 | 147 | 122 | 103 | 87 | 75 | 66 | 58 |

1. Formula's used in Load Tables for FLEXURE and DEFLECTION are:
   One Span - Mp= .125wl², Mn= .125wl², x= .0130wl^4/EI
   Two Span - Mp= .125wl², Mn= .096wl², x= .0092wl^4/EI
   Three Span - Mp= .080wl², Mn= .107wl², x= .0069wl^4/EI
   Modulas of Elasticity (E) = 29,500 ksi

2. Allowable uniform loads are determined per the following:
   a) Allowable Shear Stress (Fv) [AISI C3.2]
   b) Combined Bending and Shear [AISI C3.3]
   c) Combined Bending & Web Crippling [AISI C3.5]

3. Factors of Safety used to determine uniform loads:
   Ω (Bending) = 1.67
   Ω (Shear) = 1.67
   Ω (Web Crippling) = 1.85

4. Allowance has been made for member Dead Weight.

5. Minimum panel support bearing length = 2.00 in

6. Concentrated load = 150 lb at mid-span, load width = 4 in
   Simple Span : Max. Span = 4.444 ft (L/180)
   Two Span : Max. Span = 5.351 ft (L/180)
   Three Span +: Max. Span = 5.756 ft (L/180)

## New Tech SS550 Snap Panel

| | |
|---|---|
| Width | 14.00 in |
| Alloy | ASTM A653, G50 (Fy= 50 ksi) |
| Gauge | 24 (0.024 in) |

ALLOWABLE STRENGTH DESIGN (ASD)
Wind Load Factor = 1.0
ALLOWABLE UNIFORM LOAD (PSF)
SPAN LENGTH (Feet)

| SPAN | DEFLECTION | 4.25 | 4.50 | 4.75 | 5.00 | 5.25 | 5.50 | 5.75 | 6.00 | 6.25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | L/180 | 44 | 39 | 35 | 31 | 28 | 26 | 23 | 21 | 20 |
| | L/240 | 44 | 39 | 35 | 31 | 28 | 26 | 23 | 21 | 19 |
| | L/360 | 39 | 33 | 28 | 24 | 21 | 18 | 16 | 14 | 12 |
| 2 | L/180 | 44 | 39 | 35 | 31 | 28 | 26 | 23 | 21 | 20 |
| | L/240 | 44 | 39 | 35 | 31 | 28 | 26 | 23 | 21 | 20 |
| | L/360 | 44 | 39 | 35 | 31 | 28 | 26 | 23 | 20 | 18 |
| 3 | L/180 | 51 | 45 | 41 | 36 | 33 | 30 | 27 | 25 | 23 |
| | L/240 | 51 | 45 | 41 | 36 | 33 | 30 | 27 | 25 | 23 |
| | L/360 | 51 | 45 | 41 | 36 | 33 | 30 | 27 | 25 | 23 |

1. Formula's used in Load Tables for FLEXURE and DEFLECTION are:
   One Span - Mp= .125wl², Mn= .125wl², x= .0130wl^4/EI
   Two Span - Mp= .125wl², Mn= .096wl², x= .0092wl^4/EI
   Three Span - Mp= .080wl², Mn= .107wl², x= .0069wl^4/EI
   Modulas of Elasticity (E) = 29,500 ksi

2. Allowable uniform loads are determined per the following:
   a) Allowable Shear Stress (Fv) [AISI C3.2]
   b) Combined Bending and Shear [AISI C3.3]
   c) Combined Bending & Web Crippling [AISI C3.5]

3. Factors of Safety used to determine uniform loads:
   Ω (Bending) = 1.67
   Ω (Shear) = 1.67
   Ω (Web Crippling) = 1.85

4. Allowance has been made for member Dead Weight.

5. Minimum panel support bearing length = 2.00 in

6. Concentrated load = 150 lb at mid-span, load width = 4 in
   Simple Span : Max. Span = 4.444 ft (L/180)
   Two Span : Max. Span = 5.351 ft (L/180)
   Three Span +: Max. Span = 5.756 ft (L/180)

New Tech SS550 Snap Panel

| | |
|---|---|
| Width | 14.00 in |
| Alloy | ASTM A653, G50 (Fy= 50 ksi) |
| Gauge | 24 (0.024 in) |

ALLOWABLE STRENGTH DESIGN (ASD)
Wind Load Factor = 1.0
ALLOWABLE UNIFORM LOAD (PSF)
SPAN LENGTH (Feet)

| SPAN | DEFLECTION | 6.50 | 6.75 | 7.00 | 7.25 | 7.50 | 7.75 | 8.00 | 8.25 | 8.50 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | L/180 | 18 | 17 | 15 | 14 | 13 | 12 | 11 | 11 | 10 |
| | L/240 | 17 | 15 | 13 | 12 | 11 | 10 | 9 | 8 | 7 |
| | L/360 | 11 | 10 | 9 | 8 | 7 | 7 | 6 | 5 | 5 |
| 2 | L/180 | 18 | 17 | 15 | 14 | 13 | 12 | 11 | 11 | 10 |
| | L/240 | 18 | 17 | 15 | 14 | 13 | 12 | 11 | 11 | 10 |
| | L/360 | 16 | 14 | 12 | 11 | 10 | 9 | 8 | 8 | 7 |
| 3 | L/180 | 21 | 19 | 18 | 17 | 16 | 14 | 13 | 13 | 12 |
| | L/240 | 21 | 19 | 18 | 17 | 16 | 14 | 13 | 13 | 12 |
| | L/360 | 21 | 19 | 17 | 15 | 14 | 12 | 11 | 10 | 9 |

1. Formula's used in Load Tables for FLEXURE and DEFLECTION are:
   One Span - Mp= .125wl², Mn= .125wl², x= .0130wl^4/EI
   Two Span - Mp= .125wl², Mn= .096wl², x= .0092wl^4/EI
   Three Span - Mp= .080wl², Mn= .107wl², x= .0069wl^4/EI
   Modulas of Elasticity (E) = 29,500 ksi

2. Allowable uniform loads are determined per the following:
   a) Allowable Shear Stress (Fv) [AISI C3.2]
   b) Combined Bending and Shear [AISI C3.3]
   c) Combined Bending & Web Crippling [AISI C3.5]

3. Factors of Safety used to determine uniform loads:
   Ω (Bending) = 1.67
   Ω (Shear) = 1.67
   Ω (Web Crippling) = 1.85

4. Allowance has been made for member Dead Weight.

5. Minimum panel support bearing length = 2.00 in

6. Concentrated load = 150 lb at mid-span, load width = 4 in
   Simple Span : Max. Span = 4.444 ft (L/180)
   Two Span : Max. Span = 5.351 ft (L/180)
   Three Span +: Max. Span = 5.756 ft (L/180)

## New Tech SS550 Snap Panel

| | |
|---|---|
| Width | 16.00 in |
| Alloy | ASTM A653, G50 (Fy= 50 ksi) |
| Gauge | 24 (0.024 in) |

ALLOWABLE STRENGTH DESIGN (ASD)
Wind Load Factor = 1.0
ALLOWABLE UNIFORM LOAD (PSF)
SPAN LENGTH (Feet)

| SPAN | DEFLECTION | 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.25 | 3.50 | 3.75 | 4.00 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | L/180 | 177 | 139 | 113 | 93 | 78 | 66 | 57 | 49 | 43 |
| | L/240 | 177 | 139 | 113 | 93 | 78 | 66 | 57 | 49 | 43 |
| | L/360 | 177 | 139 | 113 | 93 | 78 | 66 | 57 | 49 | 42 |
| 2 | L/180 | 177 | 139 | 113 | 93 | 78 | 66 | 57 | 49 | 43 |
| | L/240 | 177 | 139 | 113 | 93 | 78 | 66 | 57 | 49 | 43 |
| | L/360 | 177 | 139 | 113 | 93 | 78 | 66 | 57 | 49 | 43 |
| 3 | L/180 | 200 | 159 | 129 | 107 | 90 | 76 | 66 | 57 | 50 |
| | L/240 | 200 | 159 | 129 | 107 | 90 | 76 | 66 | 57 | 50 |
| | L/360 | 200 | 159 | 129 | 107 | 90 | 76 | 66 | 57 | 50 |

1. Formula's used in Load Tables for FLEXURE and DEFLECTION are:
   One Span - Mp= .125wl², Mn= .125wl², x= .0130wl^4/EI
   Two Span - Mp= .125wl², Mn= .096wl², x= .0092wl^4/EI
   Three Span - Mp= .080wl², Mn= .107wl², x= .0069wl^4/EI
   Modulas of Elasticity (E) = 29,500 ksi

2. Allowable uniform loads are determined per the following:
   a) Allowable Shear Stress (Fv) [AISI C3.2]
   b) Combined Bending and Shear [AISI C3.3]
   c) Combined Bending & Web Crippling [AISI C3.5]

3. Factors of Safety used to determine uniform loads:
   Ω (Bending) = 1.67
   Ω (Shear) = 1.67
   Ω (Web Crippling) = 1.85

4. Allowance has been made for member Dead Weight.

5. Minimum panel support bearing length = 2.00 in

6. Concentrated load = 150 lb at mid-span, load width = 4 in
   Simple Span : Max. Span = 4.453 ft (L/180)
   Two Span : Max. Span = 5.363 ft (L/180)
   Three Span +: Max. Span = 5.729 ft (L/180)

New Tech SS550 Snap Panel

| | |
|---|---|
| Width | 16.00 in |
| Alloy | ASTM A653, G50 (Fy= 50 ksi) |
| Gauge | 24 (0.024 in) |

ALLOWABLE STRENGTH DESIGN (ASD)
Wind Load Factor = 1.0
ALLOWABLE UNIFORM LOAD (PSF)
SPAN LENGTH (Feet)

| SPAN | DEFLECTION | 4.25 | 4.50 | 4.75 | 5.00 | 5.25 | 5.50 | 5.75 | 6.00 | 6.25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | L/180 | 38 | 34 | 30 | 27 | 25 | 22 | 20 | 19 | 17 |
| | L/240 | 38 | 34 | 30 | 27 | 25 | 22 | 20 | 19 | 17 |
| | L/360 | 35 | 30 | 25 | 22 | 19 | 16 | 14 | 13 | 11 |
| 2 | L/180 | 38 | 34 | 30 | 27 | 25 | 22 | 20 | 19 | 17 |
| | L/240 | 38 | 34 | 30 | 27 | 25 | 22 | 20 | 19 | 17 |
| | L/360 | 38 | 34 | 30 | 27 | 25 | 22 | 20 | 18 | 16 |
| 3 | L/180 | 44 | 39 | 35 | 32 | 29 | 26 | 24 | 22 | 20 |
| | L/240 | 44 | 39 | 35 | 32 | 29 | 26 | 24 | 22 | 20 |
| | L/360 | 44 | 39 | 35 | 32 | 29 | 26 | 24 | 22 | 20 |

1. Formula's used in Load Tables for FLEXURE and DEFLECTION are:
   One Span - Mp= .125wl², Mn= .125wl², x= .0130wl^4/EI
   Two Span - Mp= .125wl², Mn= .096wl², x= .0092wl^4/EI
   Three Span - Mp= .080wl², Mn= .107wl², x= .0069wl^4/EI
   Modulas of Elasticity (E) = 29,500 ksi

2. Allowable uniform loads are determined per the following:
   a) Allowable Shear Stress (Fv) [AISI C3.2]
   b) Combined Bending and Shear [AISI C3.3]
   c) Combined Bending & Web Crippling [AISI C3.5]

3. Factors of Safety used to determine uniform loads:
   Ω (Bending) = 1.67
   Ω (Shear) = 1.67
   Ω (Web Crippling) = 1.85

4. Allowance has been made for member Dead Weight.

5. Minimum panel support bearing length = 2.00 in

6. Concentrated load = 150 lb at mid-span, load width = 4 in
   Simple Span : Max. Span = 4.453 ft (L/180)
   Two Span : Max. Span = 5.363 ft (L/180)
   Three Span +: Max. Span = 5.729 ft (L/180)

# New Tech SS550 Snap Panel

| | |
|---|---|
| Width | 16.00 in |
| Alloy | ASTM A653, G50 (Fy= 50 ksi) |
| Gauge | 24 (0.024 in) |

ALLOWABLE STRENGTH DESIGN (ASD)
Wind Load Factor = 1.0
ALLOWABLE UNIFORM LOAD (PSF)
SPAN LENGTH (Feet)

| SPAN | DEFLECTION | 6.50 | 6.75 | 7.00 | 7.25 | 7.50 | 7.75 | 8.00 | 8.25 | 8.50 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | L/180 | 16 | 14 | 13 | 12 | 11 | 11 | 10 | 9 | 9 |
| | L/240 | 15 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 7 |
| | L/360 | 10 | 9 | 8 | 7 | 6 | 6 | 5 | 5 | 4 |
| 2 | L/180 | 16 | 14 | 13 | 12 | 11 | 11 | 10 | 9 | 9 |
| | L/240 | 16 | 14 | 13 | 12 | 11 | 11 | 10 | 9 | 9 |
| | L/360 | 14 | 12 | 11 | 10 | 9 | 8 | 7 | 7 | 6 |
| 3 | L/180 | 18 | 17 | 16 | 14 | 13 | 13 | 12 | 11 | 10 |
| | L/240 | 18 | 17 | 16 | 14 | 13 | 13 | 12 | 11 | 10 |
| | L/360 | 18 | 17 | 15 | 13 | 12 | 11 | 10 | 9 | 8 |

1. Formula's used in Load Tables for FLEXURE and DEFLECTION are:
   One Span - Mp= .125wl², Mn= .125wl², x= .0130wl^4/EI
   Two Span - Mp= .125wl², Mn= .096wl², x= .0092wl^4/EI
   Three Span - Mp= .080wl², Mn= .107wl², x= .0069wl^4/EI
   Modulas of Elasticity (E) = 29,500 ksi

2. Allowable uniform loads are determined per the following:
   a) Allowable Shear Stress (Fv) [AISI C3.2]
   b) Combined Bending and Shear [AISI C3.3]
   c) Combined Bending & Web Crippling [AISI C3.5]

3. Factors of Safety used to determine uniform loads:
   Ω (Bending) = 1.67
   Ω (Shear) = 1.67
   Ω (Web Crippling) = 1.85

4. Allowance has been made for member Dead Weight.

5. Minimum panel support bearing length = 2.00 in

6. Concentrated load = 150 lb at mid-span, load width = 4 in
   Simple Span : Max. Span = 4.453 ft (L/180)
   Two Span : Max. Span = 5.363 ft (L/180)
   Three Span +: Max. Span = 5.729 ft (L/180)

## New Tech SS550 Snap Panel

| | |
|---|---|
| Width | 18.00 in |
| Alloy | ASTM A653, G50 (Fy= 50 ksi) |
| Gauge | 24 (0.024 in) |

ALLOWABLE STRENGTH DESIGN (ASD)
Wind Load Factor = 1.0
ALLOWABLE UNIFORM LOAD (PSF)

| SPAN | DEFLECTION | SPAN LENGTH (Feet) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.25 | 3.50 | 3.75 | 4.00 |
| 1 | L/180 | 157 | 124 | 100 | 83 | 69 | 59 | 50 | 44 | 38 |
| | L/240 | 157 | 124 | 100 | 83 | 69 | 59 | 50 | 44 | 38 |
| | L/360 | 157 | 124 | 100 | 83 | 69 | 59 | 50 | 44 | 38 |
| 2 | L/180 | 157 | 124 | 100 | 83 | 69 | 59 | 50 | 44 | 38 |
| | L/240 | 157 | 124 | 100 | 83 | 69 | 59 | 50 | 44 | 38 |
| | L/360 | 157 | 124 | 100 | 83 | 69 | 59 | 50 | 44 | 38 |
| 3 | L/180 | 178 | 141 | 115 | 95 | 80 | 68 | 58 | 51 | 45 |
| | L/240 | 178 | 141 | 115 | 95 | 80 | 68 | 58 | 51 | 45 |
| | L/360 | 178 | 141 | 115 | 95 | 80 | 68 | 58 | 51 | 45 |

1. Formula's used in Load Tables for FLEXURE and DEFLECTION are:
   One Span - Mp= .125wl², Mn= .125wl², x= .0130wl^4/EI
   Two Span - Mp= .125wl², Mn= .096wl², x= .0092wl^4/EI
   Three Span - Mp= .080wl², Mn= .107wl², x= .0069wl^4/EI
   Modulas of Elasticity (E) = 29,500 ksi

2. Allowable uniform loads are determined per the following:
   a) Allowable Shear Stress (Fv) [AISI C3.2]
   b) Combined Bending and Shear [AISI C3.3]
   c) Combined Bending & Web Crippling [AISI C3.5]

3. Factors of Safety used to determine uniform loads:
   Ω (Bending) = 1.67
   Ω (Shear) = 1.67
   Ω (Web Crippling) = 1.85

4. Allowance has been made for member Dead Weight.

5. Minimum panel support bearing length = 2.00 in

6. Concentrated load = 150 lb at mid-span, load width = 4 in
   Simple Span : Max. Span = 4.462 ft (L/180)
   Two Span : Max. Span = 5.311 ft (L/180)
   Three Span +: Max. Span = 5.441 ft (L/180)

## New Tech SS550 Snap Panel

| | |
|---|---|
| Width | 18.00 in |
| Alloy | ASTM A653, G50 (Fy= 50 ksi) |
| Gauge | 24 (0.024 in) |

ALLOWABLE STRENGTH DESIGN (ASD)
Wind Load Factor = 1.0
ALLOWABLE UNIFORM LOAD (PSF)
SPAN LENGTH (Feet)

| SPAN | DEFLECTION | 6.50 | 6.75 | 7.00 | 7.25 | 7.50 | 7.75 | 8.00 | 8.25 | 8.50 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | L/180 | 14 | 13 | 12 | 11 | 10 | 9 | 9 | 8 | 8 |
| | L/240 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 7 | 6 |
| | L/360 | 9 | 8 | 7 | 6 | 6 | 5 | 5 | 4 | 4 |
| 2 | L/180 | 14 | 13 | 12 | 11 | 10 | 9 | 9 | 8 | 8 |
| | L/240 | 14 | 13 | 12 | 11 | 10 | 9 | 9 | 8 | 8 |
| | L/360 | 13 | 11 | 10 | 9 | 8 | 7 | 7 | 6 | 6 |
| 3 | L/180 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 10 | 9 |
| | L/240 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 10 | 9 |
| | L/360 | 16 | 15 | 13 | 12 | 11 | 10 | 9 | 8 | 7 |

1. Formula's used in Load Tables for FLEXURE and DEFLECTION are:
   One Span - Mp= .125wl², Mn= .125wl², x= .0130wl^4/EI
   Two Span - Mp= .125wl², Mn= .096wl², x= .0092wl^4/EI
   Three Span - Mp= .080wl², Mn= .107wl², x= .0069wl^4/EI
   Modulas of Elasticity (E) = 29,500 ksi

2. Allowable uniform loads are determined per the following:
   a) Allowable Shear Stress (Fv) [AISI C3.2]
   b) Combined Bending and Shear [AISI C3.3]
   c) Combined Bending & Web Crippling [AISI C3.5]

3. Factors of Safety used to determine uniform loads:
   Ω (Bending) = 1.67
   Ω (Shear) = 1.67
   Ω (Web Crippling) = 1.85

4. Allowance has been made for member Dead Weight.

5. Minimum panel support bearing length = 2.00 in

6. Concentrated load = 150 lb at mid-span, load width = 4 in
   Simple Span : Max. Span = 4.462 ft (L/180)
   Two Span : Max. Span = 5.311 ft (L/180)
   Three Span +: Max. Span = 5.441 ft (L/180)

# New Tech SS550 Snap Panel

| | |
|---|---|
| Width | 18.00 in |
| Alloy | ASTM A653, G50 (Fy= 50 ksi) |
| Gauge | 24 (0.024 in) |

ALLOWABLE STRENGTH DESIGN (ASD)
Wind Load Factor = 1.0
ALLOWABLE UNIFORM LOAD (PSF)
SPAN LENGTH (Feet)

| SPAN | DEFLECTION | 4.25 | 4.50 | 4.75 | 5.00 | 5.25 | 5.50 | 5.75 | 6.00 | 6.25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | L/180 | 34 | 30 | 27 | 24 | 22 | 20 | 18 | 16 | 15 |
| | L/240 | 34 | 30 | 27 | 24 | 22 | 20 | 18 | 16 | 15 |
| | L/360 | 32 | 27 | 23 | 19 | 17 | 15 | 13 | 11 | 10 |
| 2 | L/180 | 34 | 30 | 27 | 24 | 22 | 20 | 18 | 16 | 15 |
| | L/240 | 34 | 30 | 27 | 24 | 22 | 20 | 18 | 16 | 15 |
| | L/360 | 34 | 30 | 27 | 24 | 22 | 20 | 18 | 16 | 14 |
| 3 | L/180 | 39 | 35 | 31 | 28 | 25 | 23 | 21 | 19 | 18 |
| | L/240 | 39 | 35 | 31 | 28 | 25 | 23 | 21 | 19 | 18 |
| | L/360 | 39 | 35 | 31 | 28 | 25 | 23 | 21 | 19 | 18 |

1. Formula's used in Load Tables for FLEXURE and DEFLECTION are:
   One Span - Mp= .125wl², Mn= .125wl², x= .0130wl^4/EI
   Two Span - Mp= .125wl², Mn= .096wl², x= .0092wl^4/EI
   Three Span - Mp= .080wl², Mn= .107wl², x= .0069wl^4/EI
   Modulas of Elasticity (E) = 29,500 ksi

2. Allowable uniform loads are determined per the following:
   a) Allowable Shear Stress (Fv) [AISI C3.2]
   b) Combined Bending and Shear [AISI C3.3]
   c) Combined Bending & Web Crippling [AISI C3.5]

3. Factors of Safety used to determine uniform loads:
   Ω (Bending) = 1.67
   Ω (Shear) = 1.67
   Ω (Web Crippling) = 1.85

4. Allowance has been made for member Dead Weight.

5. Minimum panel support bearing length = 2.00 in

6. Concentrated load = 150 lb at mid-span, load width = 4 in
   Simple Span : Max. Span = 4.462 ft (L/180)
   Two Span : Max. Span = 5.311 ft (L/180)
   Three Span +: Max. Span = 5.441 ft (L/180)