


GED Integrated Solutions, Inc 31100 Diamond Pkwy Glenwillow, OH 44139		Document No.: ED-0019	Date: 06/05/2026
		Revision: AC	
Description: <b>Intercept® IG Spacer Frame Raw Material Specifications</b>			
Written By: Bill Briese			
Approved By: Tim McGlinchy			
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T) Added Opti-Close fastener info	ER 03964	BB	11/04/15
U) Added Supplier to ULTRA material	ER 04839	BB	01/10/17
V) Updated Company Address and Supplier Contacts	ER 04965	TBM	06/29/18
W) Updated Supplier Listings, Add Scrivet	ER05146	BB	03/18/19
X) Updated Blackline Supplier Listing	ER05193	BB	05/06/19
Y) Updated Supplier Listings	ER05201	BB	06/03/19
Z) Add Ulbrich, Upd Berlin contact	ER05386	BB	08/05/20
AA) Add Jadtis	ER05730	BB	02/28/22
AB) Add SBMS (NAS) Sealants	ER 05996	TBM	09/07/23
AC) Add Extreme & update suppliers	ER 06338	KJH	06/05/26

## Contents

<b>OVERVIEW</b> .....	<b>4</b>
<b>PURCHASING MATERIAL</b> .....	<b>4</b>
<b>HANDLING MATERIAL</b> .....	<b>4</b>
<b>STORING MATERIAL</b> .....	<b>5</b>
<b>Intercept Extreme ULTRA &amp; Extreme Blackline Specifications</b> .....	<b>6</b>
<i>Material Description</i> .....	6
<i>Blackline Optional Surface Coating</i> .....	6
<i>Strip Width Specifications, Intercept Extreme ULTRA &amp; Extreme Blackline</i> .....	7
<b>Intercept ULTRA &amp; Blackline ULTRA Stainless Steel Specifications</b> .....	<b>8</b>
<i>Material Description</i> .....	8
<i>Blackline Optional Surface Coating</i> .....	8
<b>Intercept ThinPlate Steel Specifications</b> .....	<b>9</b>
<i>Material Description</i> .....	9
<b>Intercept ThinPlate Blackline Steel Specifications</b> .....	<b>10</b>
<i>Material Description</i> .....	10
<i>Intercept ThinPlate Blackline Steel (Surface Coating)</i> .....	10
<b>Strip Width Specifications, Intercept ULTRA &amp; Intercept ThinPlate</b> .....	<b>11</b>
<i>Strip Width Specifications (Metric), Intercept ULTRA &amp; Intercept ThinPlate</i> .....	12
<b>Intercept Tin Plate Steel Specifications</b> .....	<b>13</b>
<i>Material Description</i> .....	13
<b>Intercept Blackline Steel Specifications</b> .....	<b>14</b>
<i>Material Description</i> .....	14
<i>Intercept Blackline Steel (Surface Coating)</i> .....	14
<b>Strip Width Specifications: Tin Plate &amp; Blackline Steel</b> .....	<b>15</b>
<i>Strip Width Specifications (Metric): TinPlate &amp; Blackline Steel</i> .....	16
<b>Approved Suppliers for Intercept Spacer Material</b> .....	<b>17</b>
<b>Sealant and Desiccant Matrix</b> .....	<b>18</b>
<i>Suppliers</i> .....	18
<b>GED Scrivets</b> .....	<b>19</b>
<i>Material Description</i> .....	19
<i>Supplier</i> .....	19
<b>Screws</b> .....	<b>19</b>
<i>Material Description</i> .....	19
<i>Suppliers</i> .....	19
<b>Rivets</b> .....	<b>20</b>
<i>Material Description</i> .....	20
<i>Suppliers</i> .....	20
<b>Opti-Close</b> .....	<b>20</b>

<i>Material Description</i> .....	20
<i>Suppliers</i> .....	20
<b>Muntin End Clips and Joiners</b> .....	<b>21</b>
<i>Material Description</i> .....	21
<i>Approved Supplier</i> .....	21
<b>Laser &amp; Ink-Jet Spacer Marking Systems</b> .....	<b>21</b>
<i>Laser Marking Systems</i> .....	21
<i>Ink-Jet Printers</i> .....	21
<b>For More Information</b> .....	<b>22</b>
<i>Vitro</i> .....	22
<i>GED Integrated Solutions, Inc.</i> .....	22

## OVERVIEW

This document contains the raw material specifications for Intercept® IG Spacer Frames. This edition supersedes any previously published specifications, and is intended to clarify the specifications, rather than change material requirements.

## PURCHASING MATERIAL

When purchasing steel, *make sure all the specifications are met exactly*. Check the size, packaging, and coating. Make sure the edges of the material are not damaged. Material that does not meet these specifications will cause machine malfunction and/or damage. *Use of material that fails to meet these specifications will void the machine warranty.*

This document lists several approved companies that supply raw materials. They may or may not be exclusive suppliers. All companies listed here have demonstrated the ability to deliver quality materials that meet these specifications. NOTE: Ashland Products is the exclusive producer of muntin end clips and Contour Grid Joiners under license.

## HANDLING MATERIAL

*Proper handling of coils and reels promotes worker safety maintains the integrity of the coils and reels.*

- Do NOT remove Extreme coils from their corrugated reels.
- Non-Extreme coils weigh over 200lbs and should only be lifted using an assist device. Extreme reels weigh about 80lbs and can be handled by two people or an assist device.
- Mount coils/reels on uncoiler before removing strapping or banding.
- Do not remove tape from the end of the coil until the outer Coil Guard is fixed in place.
- Partial Extreme reels should remain on the uncoiler to maintain the coil integrity. The nature of the strip being thicker in the center means the coil will tend to widen if not held. \*\*GED recommends using a separate uncoiler to eliminate unloading and reloading Extreme materials to minimize damage to the coil.
- Partial coils/reels should have the end taped down when not in use.
- If removing a partial coil, secure the coil with banding or reinforced tape BEFORE removing it from the uncoiler.

## STORING MATERIAL

*Make sure the material is stored properly.* Improper storage will damage the material, making it unusable.

- Do NOT remove Extreme coils from their corrugated reels.
- Use smooth, dry chipboard between non-Extreme coils. (The corrugated reels for Extreme serve the same function)
- Keep the coils wrapped in a rust-resistive plastic bag (Cortec or equivalent) to protect the material from moisture and prevent rust during shipment and storage. This also prevents dust from collecting between the layers..
- Do not use shrink wrap. The pressure can induce camber in the coil and damage the corrugated reels resulting in uncoiling issues.
- Keep the material in a clean, dry room under a constant temperature.
- Keep the material away from moisture.
- Rewrap and cover any unused material.

## FOR FURTHER ASSISTANCE

If you have any questions, contact the GED Integrated Solutions Customer Service Department at (330) 963-5401.

## Intercept Extreme ULTRA & Extreme Blackline Specifications

### Material Description

(The metal must be clean and dry. Make sure the edges are not damaged.) Berlin Metals Stainless Steel type Intercept ULTRA.

Material Thickness	0.0076" + 0.0008"/- 0.0000"
Strip Width Tolerance	+ 0.001" / - 0.008" Burr allowance 10% of M.T.
Coil Core Size (I.D)	16"
Coil O.D.	36" maximum
Coil Weight of 1 inch wide material	80 lb. (approximate)
Linear feet/coil	2800 ft. (approximate)

### Blackline Optional Surface Coating

Paint Manufacturer	Specialty Coatings Company (Becker Industrial Coatings)
Product	Specialty Super Series 3000 Polyester
Product Code	408-1-K1030
Color & Finish	Gloss Black
Coating Thickness per Side (Ref.)	0.0006" to 0.0007"
Hardness (Ref.)	F Eagle Turquoise
Solvent Resistance (Ref.)	50+ Double Rubs, MEK
Flexibility (Ref.)	0T Bend

Both sides of the material are coated using identical material. The requirements for substrate pre-treatment, coating thickness, flexibility, hardness, adhesion and chemical resistance are specified and controlled by Specialty Coatings Technical Data Sheets. Values contained on this table are for reference purposes only.

## Strip Width Specifications, Intercept Extreme ULTRA & Extreme Blackline

Strip Width Specifications – English Measurements Standard Profile (.300" side wall height)	
Spacer Width (+/- 0.005")	Strip Width (+ 0.001/ - 0.008")
7/32"	Not Applicable †
1/4"	Not Applicable †
9/32"	Not Applicable †
5/16"	Not Applicable †
11/32"	Not Applicable †
3/8"	Not Applicable †
13/32"	Not Applicable †
7/16"	Not Applicable †
15/32"	1.131"
1/2"	Future *
17/32"	1.193"
9/16"	1.225"
19/32"	1.257"
5/8"	1.288"
21/32"	Future *
11/16"	Future *
23/32"	1.383"
3/4"	Future *
25/32"	Future *
13/16"	Future *
27/32"	Future *
7/8"	Future *

† Size not compatible with 3mm thermal break

\* Size to be developed as market requires

## Intercept ULTRA & Blackline ULTRA Stainless Steel Specifications

### Material Description

(The metal must be clean and dry. Make sure the edges are not damaged.) Berlin Metals Stainless Steel, type Intercept ULTRA.

Material Thickness	0.0076" + 0.0008"/- 0.0000"
Cut Slit Width Tolerance	+ 0.000" / - 0.005" Burr allowance 10% of M.T.
Coil Core Size (I.D)	16"
Coil O.D.	36" maximum
Coil Weight of 1 inch wide material	232 lb. (approximate)
Linear feet/coil	8500 ft. (approximate)

### Blackline Optional Surface Coating

Paint Manufacturer	Specialty Coatings Company (Becker Industrial Coatings)
Product	Specialty Super Series 3000 Polyester
Product Code	408-1-K1030
Color & Finish	Gloss Black
Coating Thickness per Side (Ref.)	0.0006" to 0.0007"
Hardness (Ref.)	F Eagle Turquoise
Solvent Resistance (Ref.)	50+ Double Rubs, MEK
Flexibility (Ref.)	0T Bend

Both sides of the material are coated using identical material. The requirements for substrate pre-treatment, coating thickness, flexibility, hardness, adhesion and chemical resistance are specified and controlled by Specialty Coatings Technical Data Sheets. Values contained on this table are for reference purposes only.

## Intercept ThinPlate Steel Specifications

### Material Description

(The metal must be clean and dry. Make sure the edges are not damaged.)

Material Thickness	Nominal 0.0077", Range 0.0069"- 0.0085"
Weight	70# per base box (0.0077") thickness
Finish	Matte or bright
Coating	0.25# matte or reflowed electrolytic tin plate
Alternative Coating	0.10# matte or reflowed electrolytic tin plate
Oil Level	ATBC (Acetyl tributyl citrate) oil level 1 or minimum
Chemtreat	CDC-5 450 +/- 100 Micrograms/sq ft.
Coil Core Size (I.D.)	16"
Coil O.D.	36" maximum
Coil Weight	230 lb. (approximate)
Linear feet/coil	8500 ft. (approximate)
Cut Slit Width Tolerance	+ 0.000" / - 0.005" Burr free edge
Coils Skidded	2500 lb. maximum

## Intercept ThinPlate Blackline Steel Specifications

### Material Description

(The metal must be clean and dry. Make sure the edges are not damaged.)

Material	Black plate steel
Material Thickness (Uncoated)	Nominal 0.0077", Range 0.0069" - 0.0085"
Weight	70# per base box (0.0077") thickness
Finish	#5C finish (AIM 40 to 60 microinches)
Oil Level	ATBC (Acetal tributyl citrate) oil level 1 or minimum
Coil Core Size (I.D.)	16"
Coil O.D.	36" maximum
Coil Weight	230 lb. (approximate)
Linear feet/coil	8500 ft. (approximate)
Cut Slit Width Tolerance	+ 0.000" / - 0.005" Burr free edge
Coils Skidded	2500 lb. maximum

### Intercept ThinPlate Blackline Steel (Surface Coating)

Paint Manufacturer	Specialty Coatings Company (Becker Industrial Coatings)
Product	Specialty Super Series 3000 Polyester
Product Code	408-1-K1030
Color & Finish	Gloss Black
Coating Thickness per Side (Ref.)	0.0006" to 0.0007"
Hardness (Ref.)	F Eagle Turquoise
Solvent Resistance (Ref.)	50+ Double Rubs, MEK
Flexibility (Ref.)	0T Bend

Both sides of the material are coated using identical material. The requirements for substrate pre-treatment, coating thickness, flexibility, hardness, adhesion and chemical resistance are specified and controlled by Specialty Coatings Technical Data Sheets. Values contained on this table are for reference purposes only.

## Strip Width Specifications, Intercept ULTRA & Intercept ThinPlate

<b>Strip Width Specifications – English Measurements</b>	
Standard Profile (.300" side wall height)	
Spacer Width (+/- 0.005")	Strip Width (+ 0.000/ - 0.005")
7/32"	0.882"
1/4"	0.913"
9/32"	0.944"
5/16"	0.976"
11/32"	1.006"
3/8"	1.038"
13/32"	1.069"
7/16"	1.101"
15/32"	1.131"
1/2"	1.163"
17/32"	1.193"
9/16"	1.225"
19/32"	1.257"
5/8"	1.288"
21/32"	1.319"
11/16"	1.351"
23/32"	1.383"
3/4"	1.413"
25/32"	1.445"
13/16"	1.476"
27/32"	1.507"
7/8"	1.538"

## Strip Width Specifications (Metric), Intercept ULTRA & Intercept ThinPlate

<b>Strip Width Specifications – Metric Measurements</b>	
Standard Profile (7.62mm side wall height)	
Spacer Width (+/- 0.13mm)	Strip Width (+ 0.00/ 0.13mm)
6.0 mm	22.87 mm
6.5 mm	23.37 mm
7.0 mm	23.87 mm
7.5 mm	24.37 mm
8.0 mm	24.87 mm
8.5 mm	25.37 mm
9.0 mm	25.87 mm
9.5 mm	26.37 mm
10.0 mm	26.87 mm
10.5 mm	27.37 mm
11.0 mm	27.87 mm
11.5 mm	28.37 mm
12.0 mm	28.87 mm
12.5 mm	29.37 mm
13.0 mm	29.87 mm
13.5 mm	30.37 mm
14.0 mm	30.87 mm
14.5 mm	31.37 mm
15.0 mm	31.87 mm
15.5 mm	32.37 mm
16.0 mm	32.87 mm
16.5 mm	33.37 mm
17.0 mm	33.87 mm
17.5 mm	34.37 mm
18.0 mm	34.87 mm
18.5 mm	35.37 mm
19.0 mm	35.87 mm
19.5 mm	36.37 mm
20.0 mm	36.87 mm
20.5 mm	37.37 mm
21.0 mm	37.87 mm
21.5 mm	38.37 mm
22.0 mm	38.87 mm
22.5 mm	39.37 mm

## Intercept Tin Plate Steel Specifications

### Material Description

(The metal must be clean and dry. Make sure the edges are not damaged.)

Material Thickness	Nominal 0.0105", Range 0.0097"- 0.0110"
Weight	95# per base box (0.0105") thickness
Temper	T - 4 (AIM 58 - 64) RW 30-T Continuous Annealing Process
Finish	#5 finish (AIM 45 +/- 15 microinches)
Coating	0.25# matte or reflowed electrolytic tin plate
Alternative Coating	0.10# matte or reflowed electrolytic tin plate
Oil Level	ATBC (Acetal tributyl citrate) oil level 1 or minimum
Chemtreat	CDC-5 450 +/- 100 Micrograms/sq ft.
Coil Core Size (I.D.)	16"
Coil O.D.	36" maximum
Coil Weight	230 lb. (approximate)
Linear feet/coil	6900 ft. (approximate)
Cut Slit Width Tolerance	+ 0.000" / - 0.005" Burr free edge
Coils Skidded	2500 lb. maximum

## Intercept Blackline Steel Specifications

### Material Description

(The metal must be clean and dry. Make sure the edges are not damaged.)

Material	Black plate steel
Material Thickness (Uncoated)	Nominal 0.0097", Range 0.0087" to 0.0107"
Weight	88# per base box (0.0097") thickness
Temper	T - 4 (AIM 58 to 64) RW 30-T Continuous Annealing Process
Finish	#5C finish (AIM 40 to 60 microinches)
Oil Level	ATBC (Acetal tributyl citrate) oil level 1 or minimum
Coil Core Size (I.D.)	16"
Coil O.D.	36" maximum
Coil Weight	230 lb. (approximate)
Linear feet/coil	6900 ft. (approximate)
Cut Slit Width Tolerance	+ 0.000" / - 0.005" Burr free edge
Coils Skidded	2500 lb. maximum

### Intercept Blackline Steel (Surface Coating)

Paint Manufacturer	Specialty Coatings Company (Becker Industrial Coatings)
Product	Specialty Super Series 3000 Polyester
Product Code	408-1-K1030
Color & Finish	Gloss Black
Coating Thickness per Side (Ref.)	0.0006" to 0.0007"
Hardness (Ref.)	F Eagle Turquoise
Solvent Resistance (Ref.)	50+ Double Rubs, MEK
Flexibility (Ref.)	0T Bend

Both sides of the material are coated using identical material. The requirements for substrate pre-treatment, coating thickness, flexibility, hardness, adhesion and chemical resistance are specified and controlled by Specialty Coatings Technical Data Sheets. Values contained on this table are for reference purposes only.

## Strip Width Specifications: Tin Plate & Blackline Steel

<b>Strip Width Specifications – English Measurements</b>			
Standard Profile Spacers (.300" side wall height)		Low Profile Spacers (.250" side wall height)	
Spacer Width (+/- 0.005")	Strip Width (+ 0.000/- 0.005")	Spacer Width (+/- 0.005")	Strip Width (+ 0.000/- 0.005")
7/32"	0.862"	7/32"	.762"
1/4"	0.893"	1/4"	.793"
9/32"	0.924"	9/32"	.824"
5/16"	0.956"	5/16"	.856"
11/32"	0.986"	11/32"	.886"
3/8"	1.018"	3/8"	.918"
13/32"	1.049"	13/32"	.949"
7/16"	1.081"	7/16"	.981"
15/32"	1.111"	15/32"	1.011"
1/2"	1.143"	1/2"	1.043"
17/32"	1.173"	17/32"	1.073"
9/16"	1.205"	9/16"	1.105"
19/32"	1.237"	19/32"	1.137"
5/8"	1.268"	5/8"	1.168"
21/32"	1.300"	21/32"	1.200"
11/16"	1.331"	11/16"	1.231"
23/32"	1.363"	23/32"	1.263"
3/4"	1.393"	3/4"	1.293"
25/32"	1.425"	25/32"	1.325"
13/16"	1.455"	13/16"	1.356"
27/32"	1.487"	27/32"	1.387"
7/8"	1.518"	7/8"	1.418"

## Strip Width Specifications (Metric): TinPlate & Blackline Steel

Strip Width Specifications - Metric Measurements			
Standard Profile Spacers		Low Profile Spacers	
Spacer Width (+/- .13 mm)	Strip Width (+.00/-.13 mm)	Spacer Width (+/- .13 mm)	Strip Width (+.00/-.13 mm)
6.0 mm	22.35 mm	6.0 mm	19.85 mm
6.5 mm	22.85 mm	6.5 mm	20.35 mm
7.0 mm	23.35 mm	7.0 mm	20.85 mm
7.5 mm	23.85 mm	7.5 mm	21.35 mm
8.0 mm	24.35 mm	8.0 mm	21.85 mm
8.5 mm	24.85 mm	8.5 mm	22.35 mm
9.0 mm	25.35 mm	9.0 mm	22.85 mm
9.5 mm	25.85 mm	9.5 mm	23.35 mm
10.0 mm	26.35 mm	10.0 mm	23.85 mm
10.5 mm	26.85 mm	10.5 mm	24.35 mm
11.0 mm	27.35 mm	11.0 mm	24.85 mm
11.5 mm	27.85 mm	11.5 mm	25.35 mm
12.0 mm	28.35 mm	12.0 mm	25.85 mm
12.5 mm	28.85 mm	12.5 mm	26.35 mm
13.0 mm	29.35 mm	13.0 mm	26.85 mm
13.5 mm	29.85 mm	13.5 mm	27.35 mm
14.0 mm	30.35 mm	14.0 mm	27.85 mm
14.5 mm	30.85 mm	14.5 mm	28.35 mm
15.0 mm	31.35 mm	15.0 mm	28.85 mm
15.5 mm	31.85 mm	15.5 mm	29.35 mm
16.0 mm	32.35 mm	16.0 mm	29.85 mm
16.5 mm	32.85 mm	16.5 mm	30.35 mm
17.0 mm	33.35 mm	17.0 mm	30.85 mm
17.5 mm	33.85 mm	17.5 mm	31.35 mm
18.0 mm	34.35 mm	18.0 mm	31.85 mm
18.5 mm	34.85 mm	18.5 mm	32.35 mm
19.0 mm	35.35 mm	19.0 mm	32.85 mm
19.5 mm	35.85 mm	19.5 mm	33.35 mm
20.0 mm	36.35 mm	20.0 mm	33.85 mm
20.5 mm	36.85 mm	20.5 mm	34.35 mm
21.0 mm	37.35 mm	21.0 mm	34.85 mm
21.5 mm	37.85 mm	21.5 mm	35.35 mm
22.0 mm	38.35 mm	22.0 mm	35.85 mm
22.5 mm	38.85 mm	22.5 mm	36.35 mm

## Approved Suppliers for Intercept Spacer Material

### Approved Suppliers Extreme Ultra and Extreme Blackline

#### **Technoform North American, Inc.**

1755 Enterprise Pkwy, Ste. 300  
Twinsburg, OH 44087 U.S.A.  
Tel: (330) 487-6600  
Alexandra Blackeslee  
www.technoform.com  
Info.us@technoform.com

### Approved Suppliers, Steel – ThinPlate and TinPlate

#### **Leading Edge Distribution**

140 E. Ascot Ln.  
Cuyahoga Falls, OH 44223-3743  
Tel: (440) 786-2444  
Dave Thoman

#### **Berlin Metals**

3200 Sheffield Ave.  
Hammond, IN 46327  
Tel: (800) 754-8867 x29  
Pete Wilson

#### **Colonial Metals**

2350 Quality Lane  
Hermitage PA 16148  
Tel: (724) 346-5550  
Will Thomas

#### **Jadtis Industries**

13365 Branch View Lane  
Farmers Branch, TX 75234  
Tel: (214) 334-2403  
Bill Sultzbaugh

### Approved Suppliers, Blackline ThinPlate, TinPlate and Stainless Steel ULTRA

#### **Leading Edge Distribution**

140 E. Ascot Ln.  
Cuyahoga Falls, OH 44223-3743  
Tel: (440) 786-2444  
Dave Thoman

#### **Colonial Metals**

2350 Quality Lane  
Hermitage PA 16148  
Tel: (724) 346-5550  
Will Thomas

## Approved Suppliers, Stainless Steel ULTRA

### **Leading Edge Distribution**

140 E. Ascot Ln.  
Cuyahoga Falls, OH 44223-3743  
Tel: (440) 786-2444  
Dave Thoman

### **Colonial Metals**

2350 Quality Lane  
Hermitage PA 16148  
Tel: (724) 346-5550  
Will Thomas

### **Berlin Metals**

3200 Sheffield Ave.  
Hammond, IN 46327  
Tel: (800) 754-8867 x29  
Pete Wilson

### **Ulbrich**

12340 South Laramie Ave.  
Alsip, IL 60803  
Tel: (800) 323-7035, (708) 489-9500  
Pete Wilson

### **Jadtis Industries**

13365 Branch View Lane  
Farmers Branch, TX 75234  
Tel: (214) 334-2403  
Bill Sultzbaugh

## **Sealant and Desiccant Matrix**

### **Suppliers**

#### **HB Fuller Co. and Kömmerling**

5220 Main Street Northeast  
Minneapolis, MN 55421  
Tel: (800) 328-7307

#### **Fenzi North America**

11 Dansk Ct.  
Toronto, Ontario M9W 5N6  
Canada  
Tel: (416) 674-3831

#### **SBMS**

1610 Nationale, Terrebonne  
(Quebec) J6W 0E2, Canada  
Tel: 514-609-6707  
450-477-6707  
1-888-430-4481  
Laurent Chatagneau  
laurent@s-b-m-s.com

## GED Scrivets

### Material Description

Zinc plated steel screw

Color Size	<u>Standard Scrivet Part #</u>		<u>Cap. Tube Scrivet Part #</u>	
	Silver/Gray	Blackline	Silver/Gray	Blackline
#8-32	3-34679-1	3-34679-2	3-36244-1	3-36244-2
#10-32	3-32979-1	3-32979-2	3-33150-1	3-33150-2

### Supplier

#### GED Integrated Solutions, Inc.

31100 Diamond Pkwy.

Glenwillow, OH 44139

Tel: (330) 963-5401

Fax: (216) 539-0677

Web: store.gedusa.com

## Screws

### Material Description

Screw sizes:

- #8-32 (0.125")
- #10-32 (0.157")
- 1/4-28 (0.205")

### Suppliers

#### Leading Edge Distribution

140 E. Ascot Ln.

Cuyahoga Falls, OH 44223-3743

Tel: (440) 786-2444

Dave Thoman

## Rivets

### Material Description

Closed-end Sealing Rivets without gaskets  
3 mm and 4 mm

### Suppliers

#### Leading Edge Distribution

140 E. Ascot Ln.  
Cuyahoga Falls, OH 44223-3743  
Tel: (440) 786-2444  
Dave Thoman

#### McKeegan Sales

811 Ronda Dr.  
Canton, MI 48187  
Tel: (734) 459-5870  
3 mm rivet - Part # 4253  
4 mm rivet - Part # 4255

#### S. W. Anderson Company

Downers Grove, IL  
Tel: (630) 964-2600  
3 mm rivet - Part # R-4242  
4 mm rivet - Part # R-4243

## Opti-Close

(\*See Note\*)

### Material Description

4mm X 12mm slotted-hole closure

\*Note: Contact supplier for compatibility

### Suppliers

#### Leading Edge Distribution

140 E. Ascot Ln.  
Cuyahoga Falls, OH 44223-3743  
Tel: (440) 786-2444  
Dave Thoman

## Muntin End Clips and Joiners

### Material Description

Clip sizes from 7/32" - 23/32" spacer width, in 1/16" increments.

Clip sizes from 6mm to 22.5mm spacer width, in 0.5mm increments.

Grid Joiners for 25x8mm, 18x8mm, 3/4x3/16, 1-1/4x0.130

### Approved Supplier

#### AmesburyTruth

Tel: 800-866-7887

[innovations@amesburytruth.com](mailto:innovations@amesburytruth.com)

[www.amesburytruth.com/products/windows/hung/grid-clips](http://www.amesburytruth.com/products/windows/hung/grid-clips)

[www.amesburytruth.com/products/windows/hung/grid-joiners](http://www.amesburytruth.com/products/windows/hung/grid-joiners)

## Laser & Ink-Jet Spacer Marking Systems

### Laser Marking Systems

For maintenance and service:

#### VideoJet Systems

1500 Mittel Blvd

Wood Dale, IL 60191

Tel: (630) 860-7300 Sales/Corporate Office

Tel: (800)843-3610 Service

### Ink-Jet Printers

For maintenance, ink refills and service:

#### VideoJet Systems

1500 Mittel Blvd.

Wood Dale, IL 60191

Tel: (630) 860-7300 Sales/Corporate Office

Tel: (800) 843-3610 Service

#### Domino

1290 Lakeside Drive

Gurnee, IL 60031

Tel: (513) 574-0883

Tel: (800) 444-4512

## For More Information

### **Vitro**

[www.vitro.com](http://www.vitro.com)

Tel: (412) 820-8507

Fax: (412) 820-4904

Brad Boone

[bboone@vitro.com](mailto:bboone@vitro.com)

### **GED Integrated Solutions, Inc.**

[www.gedusa.com](http://www.gedusa.com)

31100 Diamond Pkwy.

Glenwillow, OH 44139

Tel: (330) 963-5401

Fax: (216) 539-0677