

Tabulated Data
Aluminum Sheeting Guide
(ASG)

February 2016

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CAUTION

EXCAVATION PROCEDURES MAY CAUSE INJURY OR DEATH!

A COMPETENT PERSON WHO SATISFIES THE DEFINITION AND INTENT OF THE 1926 CONSTRUCTION STANDARD SUBPART P EXCAVATIONS SHALL: ENSURE THAT ALL EMPLOYEES ARE WORKING IN SAFE CONDITIONS AND THAT ALL EMPLOYEES HAVE BEEN TRAINED IN CORRECT EXCAVATION PROCEDURES AND THE PROPER USE OF THE PROTECTIVE EQUIPMENT CHOSEN.

EXCAVATIONS AND PROTECTIVE EQUIPMENT SHALL BE INSPECTED A MINIMUM OF ONCE EACH WORKING DAY AND WHENEVER THERE IS A CHANGE IN THE SOIL CONDITIONS AND/OR OTHER CHANGES SUCH AS AN INCREASE OR DECREASE IN WATER OR VIBRATIONS.

EMPLOYEES SHALL NOT BE ALLOWED TO ENTER AN EXCAVATION THAT IS NOT PROPERLY SHORED, SHIELDED, OR SLOPED.

EMPLOYEES SHALL ALWAYS ENTER, WORK, AND EXIT WITHIN THE SHORED, SHIELDED, OR SLOPED AREAS OF THE EXCAVATION AND/OR TRENCH.

ALL LIFTING AND PULLING EQUIPMENT, INCLUDING CABLES, SLINGS, CHAINS, SHACKLES AND SAFETY HOOKS SHALL BE INSPECTED FOR DAMAGE OR DEFECTS PRIOR TO USE AND SHALL BE EVALUATED FOR SUITABILITY AND CAPACITY.

THIS GME TABULATED DATA PROVIDES A GENERAL SET OF GUIDELINES TO ASSIST THE COMPETENT PERSON IN THE SELECTION OF A PROTECTIVE SYSTEM FOR EMPLOYEE SAFETY. THE RESPONSIBILITY FOR JOB SITE SAFETY AND THE PROPER SELECTION, INSTALLATION AND REMOVAL OF THE SHORING EQUIPMENT BELONGS TO THE COMPETENT PERSON DESIGNATED FOR THAT JOBSITE. THIS TABULATED DATA IS NOT INTENDED TO BE USED AS A JOB SPECIFIC EXCAVATION/TRENCHING SAFETY PLAN, BUT SHALL BE USED BY THE COMPETENT PERSON. TABULATED DATA IS INTENDED AS A SUPPLEMENT TO HIS/HER TRAINING, EXPERIENCE AND KNOWLEDGE OF SAFE PROCEDURES, JOB SITE CONDITIONS AND SOIL TYPES. TABULATED DATA IS INTENDED TO ASSIST HIM IN THE SELECTION OF AN APPROPRIATE PROTECTIVE SYSTEM FOR EMPLOYEE SAFETY.

ALUMINUM SHEETING GUIDE

TABULATED DATA

GENERAL:

1. This data has been prepared by a Registered Professional Engineer as required OSHA standard 29 CRF, Part 1926, Subpart P, Excavations.
2. This data is to be used by the "competent person" for the proper use and **placement** of the Aluminum Sheeting Guide components.
3. "Competent person" is one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
4. When there is a discrepancy concerning the use of protective systems between this tabulated data and the OSHA standard, this data shall take precedence. Any topic not covered by this data shall be governed by the OSHA standard.
5. GME shall not be liable for damage or injury resulting from improper use of the Aluminum Sheeting Guide. Improper use of or modifications to the structural components not specifically authorized by GME without the written consent of GME shall void this data and all manufacturers' warranty.

SPECIFICATIONS FOR USE OF THE ALUMINUM SHEETING GUIDE

1. All personnel involved with the use of the Aluminum Sheeting Guide shall be trained in the proper use and installation procedures and other applicable safety requirements.
2. The Aluminum Sheeting Guide shall be used only in soil conditions indicated in this data.
3. Refer to the installation procedures for typical installation figures.
4. The system shall be installed in a manner to prevent lateral or otherwise hazardous movement. It is imperative that active soil pressure is applied to the frame prior to driving sheeting elements.
5. Approved GME struts for the Aluminum Sheeting Guide shall include:

LSS-1, LSS-2, LSS-2.5, LSS-3, and the ASG adjustable Strut 90-in to 126-in.

ALUMINUM SHEETING GUIDE

TABULATED DATA

SPECIFICATIONS FOR USE OF THE ALUMINUM SHEETING GUIDE CON'T

6. The struts shall not be used to support side loading, nor shall the system be lifted, pulled or moved by the struts. The system shall be installed and extracted by the lifting eyes provided by the manufacturer. Struts are not designed to support vertical loads and shall not be used to provide access or egress to the trench. Two struts are required at each opened end of the assembly in two sided or three sided applications.
7. This data is valid for Aluminum Sheeting Guide components in structurally sound condition. Any significant damage will void this data, and all manufacturers' warranty. The damaged components shall not be used.
8. The Aluminum Sheeting Guide may be utilized by replacing the struts with an additional guide in a three or four-sided configuration. ASG Corner Connectors shall be used in these configurations.
9. The maximum length of the Aluminum Sheeting Guide shall not exceed 120-in.

SOIL CLASSIFICATION

1. See the OSHA regulations for descriptions of Type A, B, and C soils.
2. Type C-60 soil is a soft cohesive or moist granular soil that is not flowing or submerged. This soil can be cut vertically and will stand long enough to safely install the protective system.

NOTES FOR TABULATED DATA

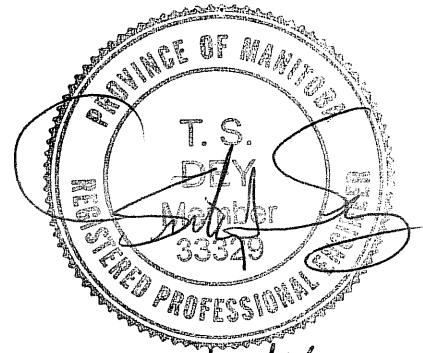
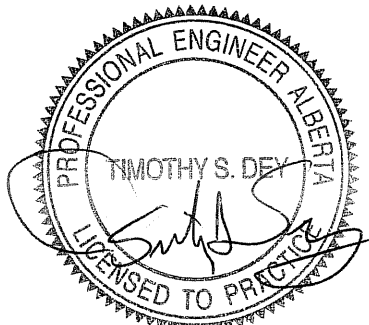
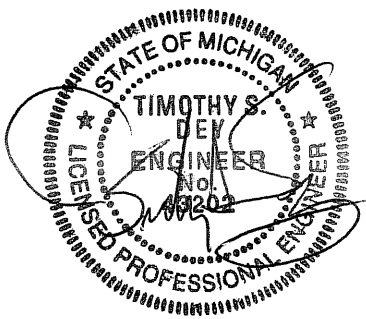
1. The Maximum Excavation Depth for the Aluminum Sheeting Guide is indicated in Table (1.1) and Table (1.2).
2. The geometric constraints for placement of the Aluminum Sheeting Guide are shown in Figure (1.1) and Figure (1.2).
3. Sheeting shall extend a minimum of 18-in above the Aluminum Sheeting Guide if it is utilized in conjunction with sloping and benching.

ALUMINUM SHEETING GUIDE

TABULATED DATA

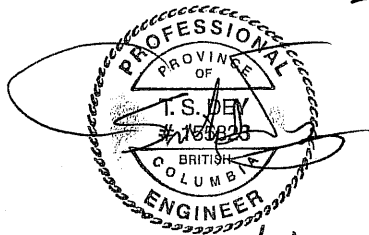
NOTES FOR TABULATED DATA CON'T

4. Surcharge loads are not included in the maximum depth tables. Surcharge loads are possible due to heavy equipment, vibrations, or soil piles adjacent to the trench. (Adjacent is defined as within a distance equal to the depth of the trench.)
5. When required clearance exceeds 60-in below the bottom strut, the sheeting elements shall be driven a minimum of 24-in into the bottom of the excavation as shown in Figure (1.2). Soil shall have sufficient strength and stability to provide adequate support at the bottom of the excavation.



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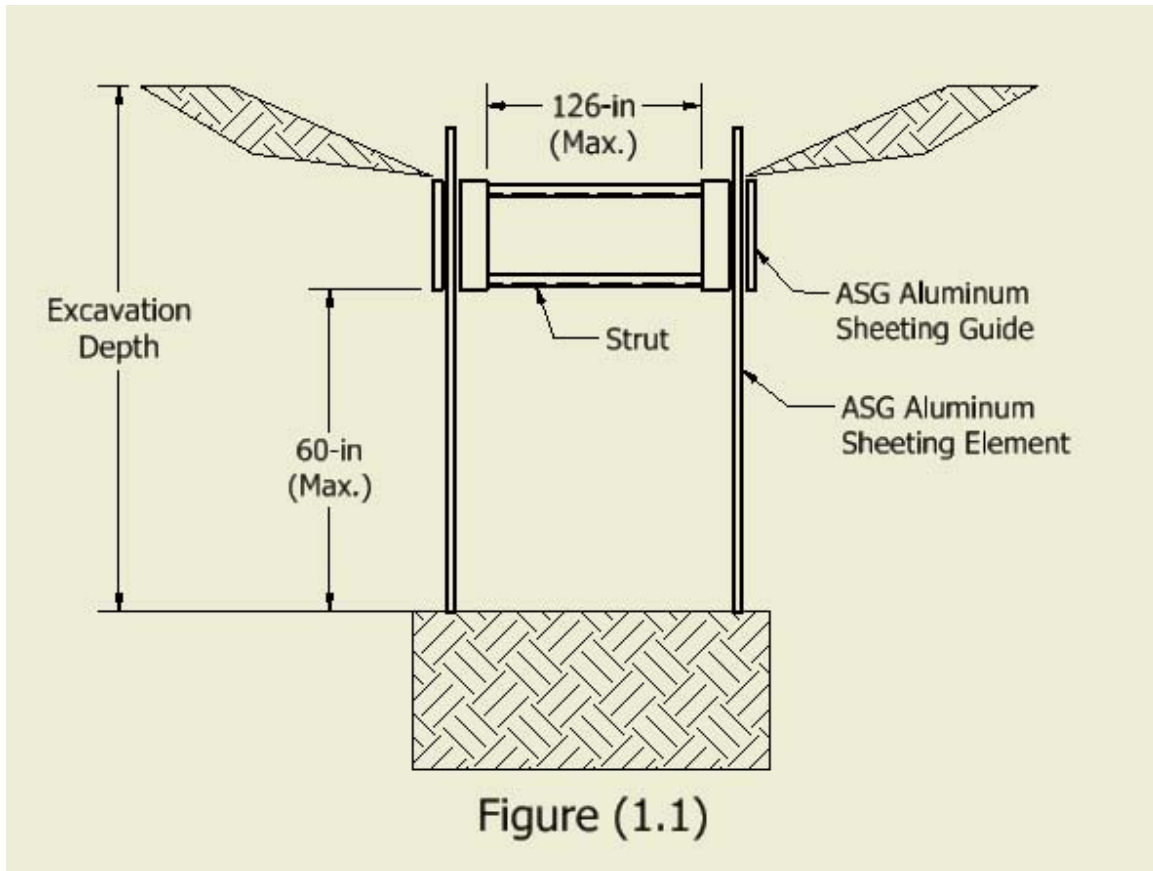


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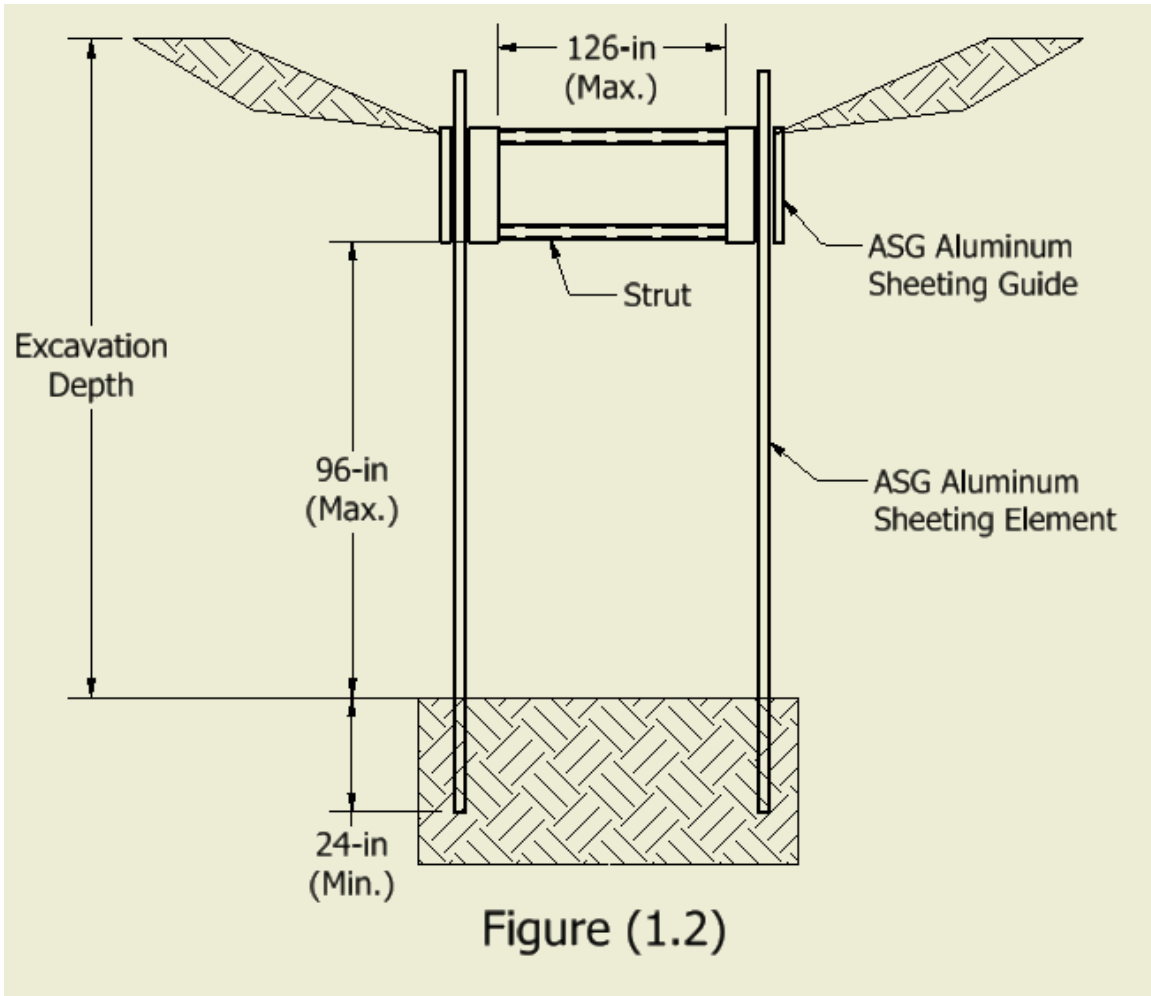
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ALUMINUM SHEETING GUIDE TABULATED DATA



ASG Maximum Excavation Depth Table (1.1)			
Soil Type			
A	B	C-60	C-80
24-ft	13-ft	10-ft	7-ft

ALUMINUM SHEETING GUIDE TABULATED DATA



ASG Maximum Excavation Depth Table (1.2)			
Soil Type			
A	B	C-60	C-80
24-ft	13-ft	10-ft	NA

ASG (Aluminum Sheeting Guide) 4-Sided Installation

Step 1. Mark or designate excavation area. Note, inside dimension of excavation is 6" more than panel length. Example, if using 10' long ASG panels, excavation will need to have a 10'6" wide internal dimension.



Step 2. Near excavation area, stand up & connect one panel to two corner posts, securing it from falling down.

Step 3. Pin in an additional panel to create an "L".

Step 4. Pin in another panel to the "L" system to create a "U".



Step 5. On remaining panel, connect remaining two corner posts. With aid of a machine, connect remaining panel/posts combination to the "U" system. Check for squareness.

Step 6. Dig 1'-2' pilot cut on perimeter of excavation area. With excavation taking place, attach ASG support post.

Step 7. Lift and install complete ASG System into pre-dug pilot cut, allowing ASG support system to rest at or just above ground level.



Step 8. Install the **NEW GME** overlapping aluminum sheet pile, with sheeting cap. Dig and push

Step 9. With excavation at or near grade, attach guard rail posts.

Step 10. At grade, attach lumber to guard rail posts.



ASG (Aluminum Sheeting Guide) 3-Sided Installation

Step 1. Mark or designate excavation area. Note, inside dimension of excavation is 6" more than panel length. Example, if using 10' long ASG panels, excavation will need to have a 10'6" wide internal dimension.



Step 2. Near excavation area, stand up & connect one panel to one corner post, securing it from falling down.

Step 3. Pin in an additional panel to create an "L".

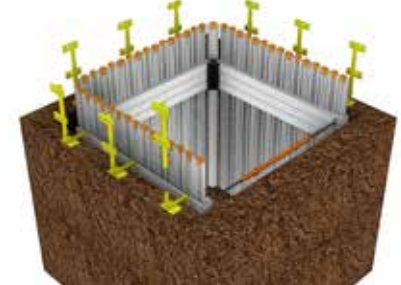
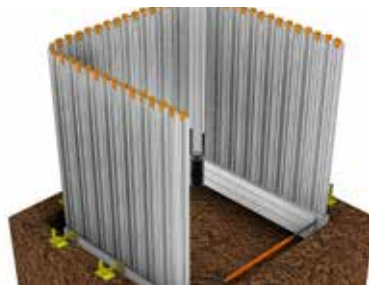
Step 4. Connect remaining corner post to remaining panel.



Step 5. With aid of a machine, connect panel/post combination to the "L" system, creating a "U".

Step 6. Attach spreaders to open side of system and check squareness.

Step 7. Dig 1'-2' pilot cut on perimeter of excavation area. With excavation taking place, attach ASG support post.



Step 8. Lift and install complete ASG System into pre-dug pilot cut, allowing ASG support system to rest at or just above ground level.

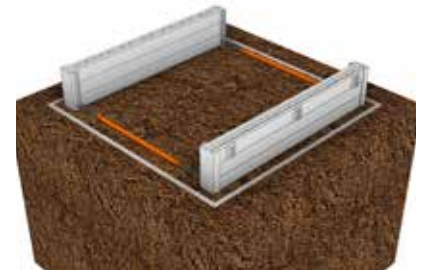
Step 9. Install the NEW GME overlapping aluminum sheet pile, with sheeting cap. Dig and push

Step 10. Attach guardrail system to ASG Support post while digging and pushing sheets to grade.



ASG (Aluminum Sheeting Guide) 2-Sided Installation

Step 1. Mark or designate excavation area. Note, inside dimension of excavation is 6" more than panel length. Example, if using 10' long ASG panels, excavation will need to have a 10'6" wide internal dimension.



Step 2. Near excavation area, stand up & connect one panel to two corner post, securing it from falling down.

Step 3. Extend spreaders to near desired excavation width. Attach bottom spreaders to standing panel.

Step 4. Attach remaining panel to opposite end attached spreaders



Step 5. Lower top spreaders into place on panels and pin together. Check for squareness.

Step 6. Dig 1'-2' pilot cut on perimeter of excavation area. With excavation taking place, attach ASG support post..

Step 7. Lift and install complete ASG System into pre-dug pilot cut, allowing ASG support system to rest at or just above ground level.



Step 8. Excavate inside of system to panel depth.

Step 9. Install the NEW GME overlapping aluminum sheet pile, with sheeting cap. Dig and push

Step 10. Attach guardrail system to ASG Support post while digging and pushing sheets to grade.



ASG (Aluminum Sheeting Guide) Removal Instructions

Step 1. When work is complete, backfill to compaction requirements. Pull sheets up and compact. Repeat as necessary.



Step 1a. When removing sheeting, make sure removal clamp is positioned as shown. This will require rotating clamp 180° to pull each adjacent sheet. Make sure the teeth of clamp are on solid surface (see arrow).



Step 2. As backfilling and compaction continues to the point at which the bottom of the sheets are pulled even with bottom of ASG Panels, remove sheets completely from system.



Step 3. With sheeting removed, remove ASG system and continue with final backfill and compaction.

