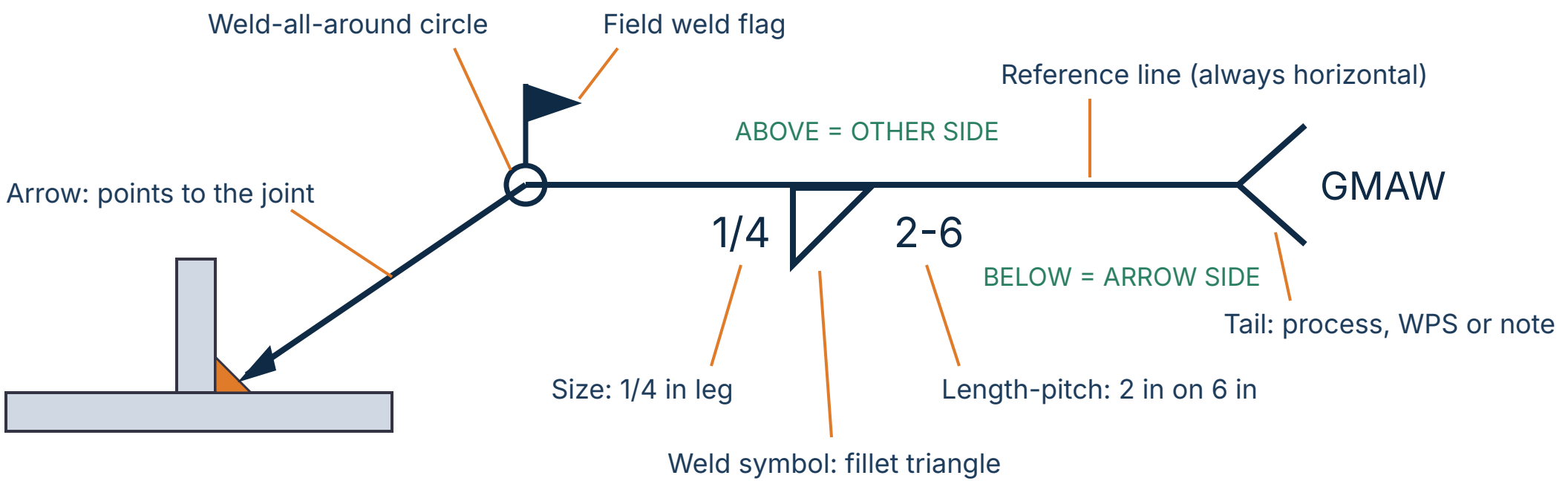
Parts of a Welding Symbol (AWS A2.4)

Read in order: arrow → reference line → weld symbol → dimensions → tail



Example: 1/4 in intermittent fillet weld, arrow side, 2 in segments on 6 in centers, all around, field weld, GMAW

Basic Weld Symbol Chart

Shapes per AWS A2.4, drawn on the arrow side (below the reference line). Spot and seam sit centered on the line.



Fillet

T, lap, corner joints



Square groove

Thin butt joints



V-groove

Both edges beveled



Bevel groove

One edge beveled



U-groove

Thick butt joints



J-groove

One member J-cut



Flare-V groove

Two rounded parts



Flare-bevel groove

Round part to flat plate



Plug

Weld through a round hole



Slot

Weld through a slot



Spot

Spot welds on sheet



Seam

Continuous resistance welds



Back or backing

Back side of a groove weld



Surfacing

Build-up on a surface



Edge

Edges of flanged parts

Dimensions, Supplementary Symbols and Finish Letters

Quick reference per AWS A2.4. Always work to the edition named on your drawing and your approved WPS.

Where the dimensions go

Value	Position	Example
Fillet leg size	Left of the triangle	**1/4**
Weld length	Right of the symbol	**6**
Pitch (intermittent)	Right, after a hyphen	**2-6**
Depth of bevel	Left, no parentheses	**3/8**
Effective weld size	Left, in parentheses	**(5/16)**
Groove angle	On / beside groove	**60°**
Root opening	Inside groove symbol	**1/8**
Plug/slot fill depth	Inside the rectangle	**1/2**
Number of spot welds	In parentheses	**(6)**
Process or WPS	In the tail	**GTAW**

Supplementary symbols

Symbol	Shape and meaning
Weld all around	Circle at arrow/line junction
Field weld	Flag at arrow/line junction
Melt-through	Filled half circle opposite groove
Backing	Rectangle opposite groove (R: remove)
Consumable insert	Open square opposite groove
Flush / flat contour	Straight line over symbol
Convex contour	Outward arc over symbol
Concave contour	Inward arc over symbol

Finish letters (with contour)

G	M	C	H	R
Grinding	Machining	Chipping	Hammering	Rolling

Read every callout in five steps

1. Find the joint the arrow touches (arrow side). A broken arrow marks the member to prepare.
2. Below the line = arrow side; above = other side; both = weld both sides.
3. Identify the weld symbol shape (see chart on page 2).
4. Read dimensions: size left, length-pitch right, angle and root opening on the symbol.
5. Check the junction (all-around circle, field flag) and the tail (process, WPS).