

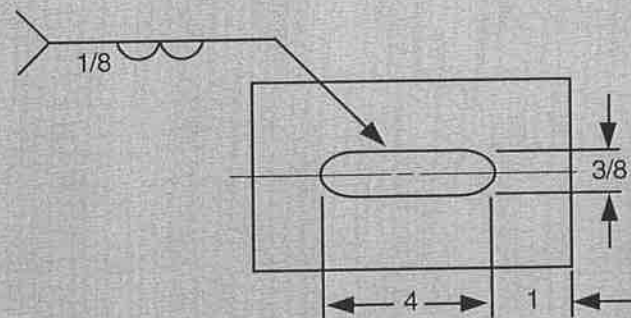
Part V: Surfacing welds and flange welds

A. Surfacing Weld Symbol

When a surface is built up by single or multiple-pass welding, this *surfacing* symbol is used:

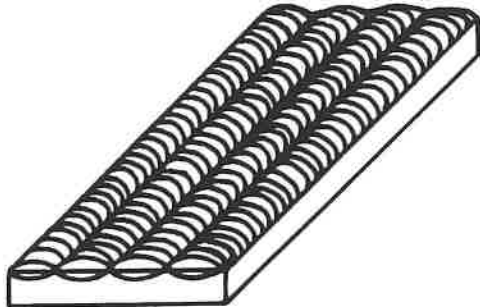


The surfacing symbol is always on the *arrow side* of the reference line. A drawing is used to indicate when a portion of a member is to be surfaced.

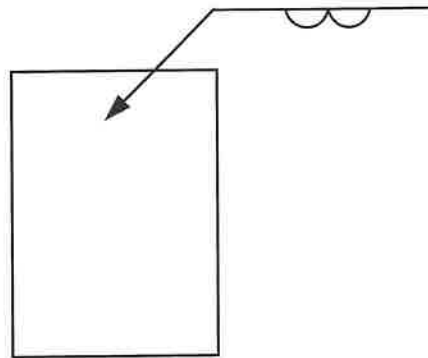


This _____ weld will have a length of _____ and a width of _____.

The surfacing weld symbol is used to show that a surface is to be built up by welding. Surfacing welds may be used to correct the size of a part, provide wear or corrosion resistance or to form a transition between two dissimilar metals.

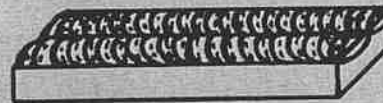


Desired Weld



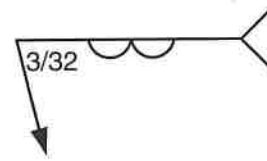
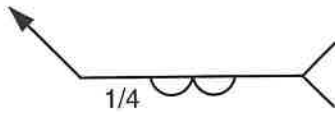
The weld symbol is always placed below the reference line. Since a joint is not involved, the weld symbol has *no* arrow or other side significance.

Draw the symbol on the view which completely shows the surface to be welded. Then label the orthographic views.



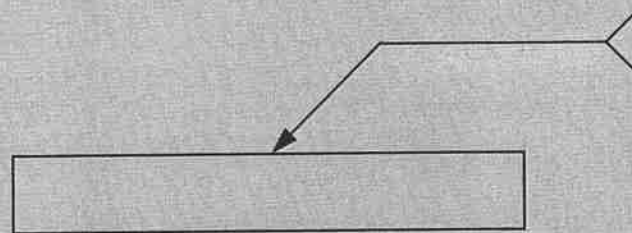
Desired Weld

The size of the *build-up* is to the left of the symbol.



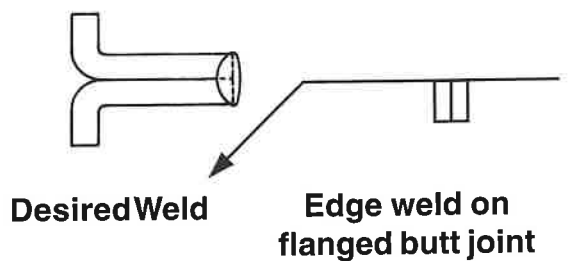
When no size is shown, the surfacing thickness is left to the welder's discretion.

Draw the symbol for a $3/16$ surfacing weld.



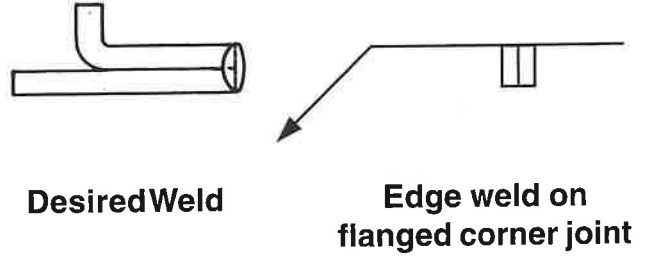
B. Edge Weld Symbols

Welding of light gauge metal joints with flared or flanged edges is shown by the *edge weld* symbols. An edge weld symbol is used to specify *edge welds on edge joints, flanged butt joints and flanged corner joints*.



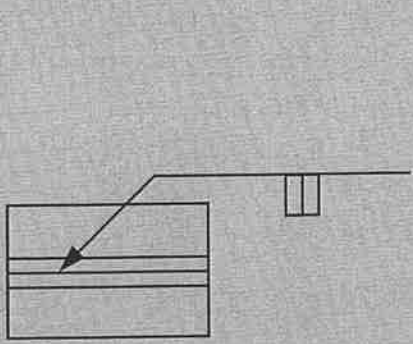
DesiredWeld

Edge weld on flanged butt joint

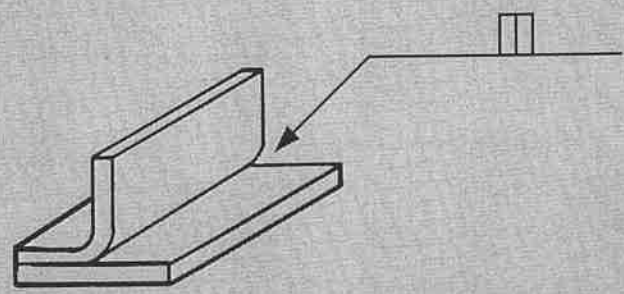


DesiredWeld

Edge weld on flanged corner joint



This is a _____
with the weld on the _____ side.



This is a _____
with the weld on the _____ side.

Edge Weld Size

The edge weld size is placed on the left of the edge weld symbol.

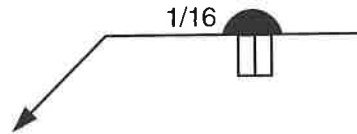


If the edge size is not required, the dimension may be omitted.



The size of the edge weld is _____ inch.

Edge welds with *complete* joint penetration and flanged butt or flanged corner joints requiring complete joint penetration will be specified with edge weld symbol. The *melt-through* symbol will be placed on the opposite side of the reference line. The amount of melt-through is specified to the left of the melt-through symbol.

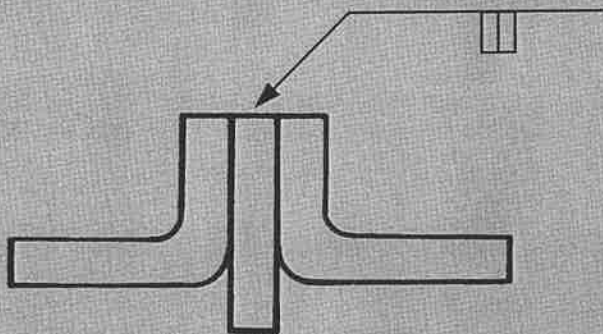
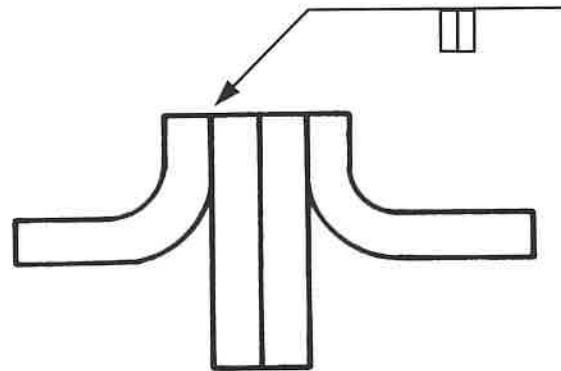


Draw the welding symbol for an *edge weld* on a flanged corner joint requiring *complete penetration* with 1/16 inch melt-through.



The Edge Weld symbol remains the same regardless of the number of pieces placed within the outside members.

Edge welds specified on edge joints, flanged butt joints, or flanged corner joints having more than two members will be displayed with the edge weld symbol.

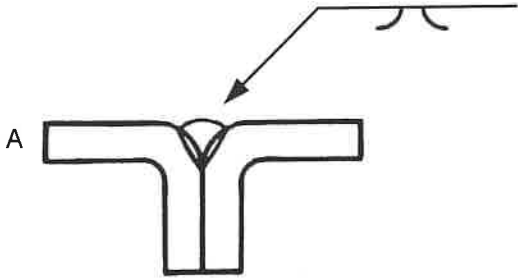


Description

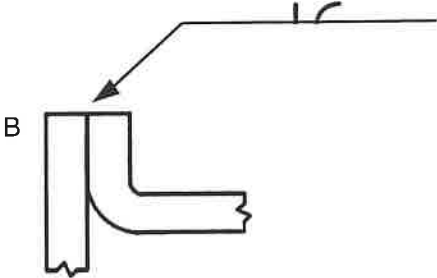
1. Type of Weld: _____

2. Type of Joint: _____

The weld symbol bends away from the reference line for flare-groove welds.



Single Flare-V-Groove Weld



Flare-Bevel-Groove Weld

Identify these weld symbols.

