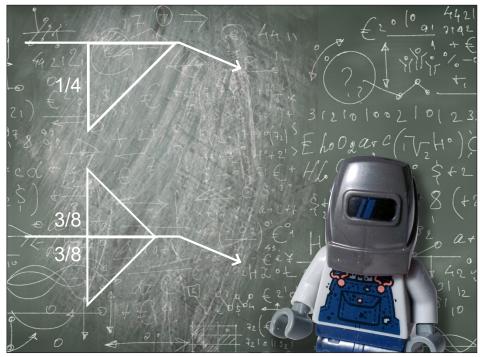
## Reese's - PIECES

RTS specializes in providing weld inspections, mappings, and condition assessment services to the tower & pole industries



The symbol at the top represents a 1/4" single fillet weld to be installed on the arrow side of the joint. The lower symbol represents two fillet welds to be installed on the arrow aspect and opposite side of the joint, respectively, 3/8" each in size. Adding a black flag in the symbol represents field welding and a circle at the reference (horizontal) line and arrow interface requires the weld to be all around.

### What Is That Weld Symbol?

eld symbols can be very confusing and sometimes difficult to interpret. In some cases, they are not depicted properly. When the welder does not understand the symbol the engineer is specifying for a joint, fabrication or field issues are likely. Variations in joint configuration from the intended design can cause reduction in load carrying capacity of the connection and in extreme cases premature failure. In this newsletter we will address a very com-

monly specified joint – the fillet weld.



Per AWS A3.0, a fillet weld is defined as a weld of triangular cross section joining two surfaces approximately at right angles to each other in a corner joint, T-joint, or lap joint. While the legs of the weld may be unequal depending on the design or geometry of the joint, typically each of the legs of a fillet weld are the same size. This weld type is one of the most common welds used in structural steel fabrication. Fillets are typically easy to install, very cost effective, and require less skill from the welder.

AWS A2.4 provides for the graphical representation of welds and is a useful reference document. The upper weld symbol designates a single fillet weld to be installed on the arrow side of the joint, 1/4" in size. The lower weld symbol designates two fillet welds to be installed on the arrow side and opposite side of the joint, respectively, both 3/8" each in size. The horizontal line of the weld symbol is called the reference line. The triangle symbol designates a fillet weld. The arrow connecting to the reference line points to the arrow side member of joint or arrow side of joint. An added black flag at the intersection of the reference line and arrow designates field welding and a circle at the same location requires the weld to be welded all around. Additional information can be specified by the engineer in the tail of the weld at the end of the horizontal reference line.

Interpreting weld symbols can be a challenge, even for the simplest of connections. If a weld symbol is unclear, we recommend calling the engineer for clarification before welding.

# NATE Releases Standards, Regulations and Safety Resources Document

he Communications Infrastructure Contractors Association is excited to release our new resource, the NATE Industry Standards, Regulations & Safety Resources Document.

The NATE Industry Standards, Regulations and Safety Resources Document was created as a tool to help navigate the various standards and regulations within the telecom industry. This Document contains links to the various standards and regulations conveniently organized by category, title, and standard/regulation.

This resource is available to Members only and available under the Safety Resource section of the Member Services portion of the website.

## RTS: Frequently Asked Questions

#### What does the term CWI mean?

A CWI is a certified weld inspector. A CWI inspection consists of a thorough inspection of the welding process including adherence to governing code, verification of base material and welding electrodes, verification of documentation including qualification records and welding procedure specifications, welding performance qualification records, welder continuity, electrode storage, surface preparation, preheat confirmation, interpass temperature verification, and adherence to project drawings regarding weld size, location, and length. Goal is to identify any abnormalities in the weld joints to AWS D1.1 Table 8.1 criteria; cracks, weld/basemetal fusion, crater cross section, weld profile, undersized welds, undercut, porosity.

#### What is a toe crack?

A toe crack is a crack observed at the weld toe. At the base plate weld in pole structures typically observed at the upper weld toe in the thin pole shaft material.

#### I have a project that I'd like a quote on - what's the next step?

To receive a custom quote and scope of work, please email us at *sales@reesetowerservices.com* or call us at (570) 359-3293 - one of our staff will get back to you immediately.

## Reese's

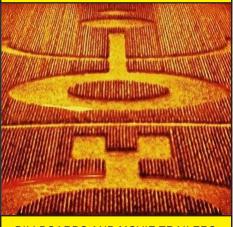
## MINIATURES

IT'S HAPPENING

and symbols



SCIENTISTS SAY SPEECH DEVELOPED 100,000 YEARS AGO WHILE SIGNS...AND SYMBOLS APPEARED MUCH EARLIER.



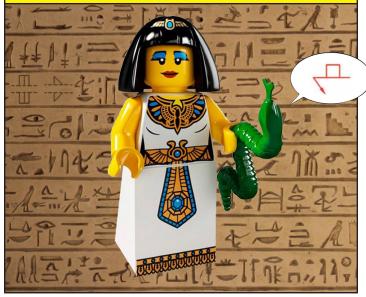
**BILLBOARDS AND MOVIE TRAILERS** SUGGEST SIGNS MADE A SPLASH IN 2002. THE HISTORY CHANNEL SUGGESTS ALIENS DID IT.

**EVIDENCE OF WRITTEN COMMUNICATION DATES TO** 30,000 YEARS AGO IN FRANCE. THESE EARLY PERSONALS AND ONLINE DATING SITES WERE EXPRESSED THROUGH SYMBOLS CARVED IN STONE



#### SCRIBBLE, SCRIBBLE ON THE WALL: IN ROUGHLY 3200 BC EGYPTIANS BEGAN USING

HIEROGLYPHS AS WRITTEN COMMUNICATION. "THESE SACRED ENGRAVED LETTERS" WERE SYMBOLS



THOUGH NOT KNOWN FOR HIS WELDING ABILITIES, REPORTS SUGGEST MOZART BECAME A MASTER OF SYMBOLS AND SIGNS



IN THE FIELD OF MUSIC.

MEH! SYMBOLS... NOT CYMBALS!

ORDS & PICTURES by Scott and Kari Dolash scottdolash@gmail Cave paintings, carved stone, hieroglyphs and musical notes represent information. Using symbols and signs, proper welding also relies on delivering

good communication.

At RTS our highly trained staff delivers superior services with weld inspections, mappings, and condition assessments visit us at:

www.reesetowerservices.com