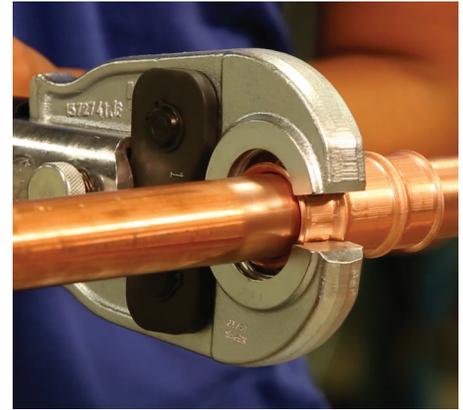


# ZoomLock™ Flame-Free Refrigerant Fittings

## Impacts the Bottom Line



### How ZoomLock Improved Dakota Refrigeration, Inc.'s Bottom Line

"We can complete the job faster, with no torch, solder or fire extinguishers, no leaks and use less experienced techs to complete the piping project. The fittings cost a little more than standard fittings, but the time savings makes up the difference."

**Mike Kempel**  
President  
DAKOTA REFRIGERATION, INC



### Customer Profile

Founded in 1974, Dakota Refrigeration, Inc. provides North Dakota, Northern South Dakota, West Central Minnesota, and Eastern Montana with food service equipment as well as refrigeration, heating, ventilation, and commercial air conditioning services. Dakota Refrigeration's capabilities cover design and installation, to maintenance and repair.

### Business Challenge

Dakota Refrigeration's large service area can result in lengthy travel time to the job-site. Mike's team was challenged with a refrigeration equipment install 200 miles from the shop. This means incurring additional costs for weekly drive time, employee lodging and daily allowances.

The refrigeration system for the 25,000 sq. ft. store was designed for use with R-449A. It included numerous medium and low temperature glass door merchandisers, 1 open meat case (6' in length) and 4 island freezers / dual temperature cases.

The refrigeration piping design specified standard circuit piping, incorporating 1 liquid pipe and 1 suction pipe per circuit. No loop piping was used.

#### Labor Requirements:

- 2 foremen, 2 apprentices
- 50-hour work week (includes 10 hours of overtime)
- Pay for weekly drive time (200 miles)
- Lodging and per diem per employee

#### Blended Rate for Job:

\$202/hour regular pay  
\$303/hour overtime (x 1.5)

**Estimated Number of Fittings Used:** 870

### Solution Overview

Dakota Refrigeration wanted to increase their bottom line and to do that, they needed to find a way to decrease labor costs which lead them to ZoomLock. HVACR contractors have had to rely on brazing as the way to join copper tubing and fittings for refrigerant lines. And, brazing requires highly trained, highly paid technicians; fire permits; fire spot- ters; brazing tools and gases; nitrogen purging; and more. With a reported

### At A Glance

**CUSTOMER:** Dakota Refrigeration, Inc.

**LOCATION:** Fargo, North Dakota

**INDUSTRY:** Supermarket Equipment, Refrigeration, Heating, Ventilation, and Air Conditioning Services

#### BUSINESS CHALLENGE:

Reduce costs of 25,000 sq. ft. store equipment install to increase bottom line

#### SOLUTION:

Use ZoomLock flame-free refrigerant fittings for installation of tube connections

#### RESULTS:

**2 Weeks Labor Cost Savings:**  
(\$11,110 Per Week X 2)      \$22,220

**Other Estimated Cost Savings**  
(Lodging, Mileage, Per Diem): + \$1,776

**Total Estimated Labor and Other Cost Savings:**      \$23,996

**ZoomLock vs. Brazed Fittings Cost Difference:**      - \$11,655

**Overall Savings Added to Bottom Line:      \$12,341**

40-60% reduction in time and labor costs on tubing connections, using ZoomLock made sense. By installing ZoomLock, Dakota Refrigeration was able to save 2 weeks in labor costs.



ENGINEERING YOUR SUCCESS.