

# DEWALT®

## ANCHORS & FASTENERS



## A DEWALT ANCHORS & FASTENERS CASE STUDY

**GUARANTEED TOUGH.®**

**ICDWANFAKCS**



# SAVE 36% LABOR COSTS ON DEWALT HANGER LIFT-RELATED INSTALLATIONS

## A DEWALT CASE STUDY

- 308 HRS. PROJECTED VS. 198 ACTUAL HOURS TO COMPLETE\*
- 110 INSTALLATION HOURS SAVED USING DEWALT PUSH-IN COUPLERS\*



We strive to be industry leaders. Our lean fabrication methodologies mixed with productive, hanger hardware like DEWALT's Push-In Couplers makes us a more valuable contractor."

**Mike Kunz**  
Construction Executive  
ArchKey Solutions



For more information on DEWALT Push-In Thread Couplers, go to  
[https://anchors.dewalt.com/anchors/documents/uploads/DWANF\\_PUSHINCOUPLER\\_TP\\_revB.pdf?1686748555](https://anchors.dewalt.com/anchors/documents/uploads/DWANF_PUSHINCOUPLER_TP_revB.pdf?1686748555)

\*ArchKey Solutions received free product from DEWALT, however the cost of this product was not included in the labor costs savings described in this Case Study.

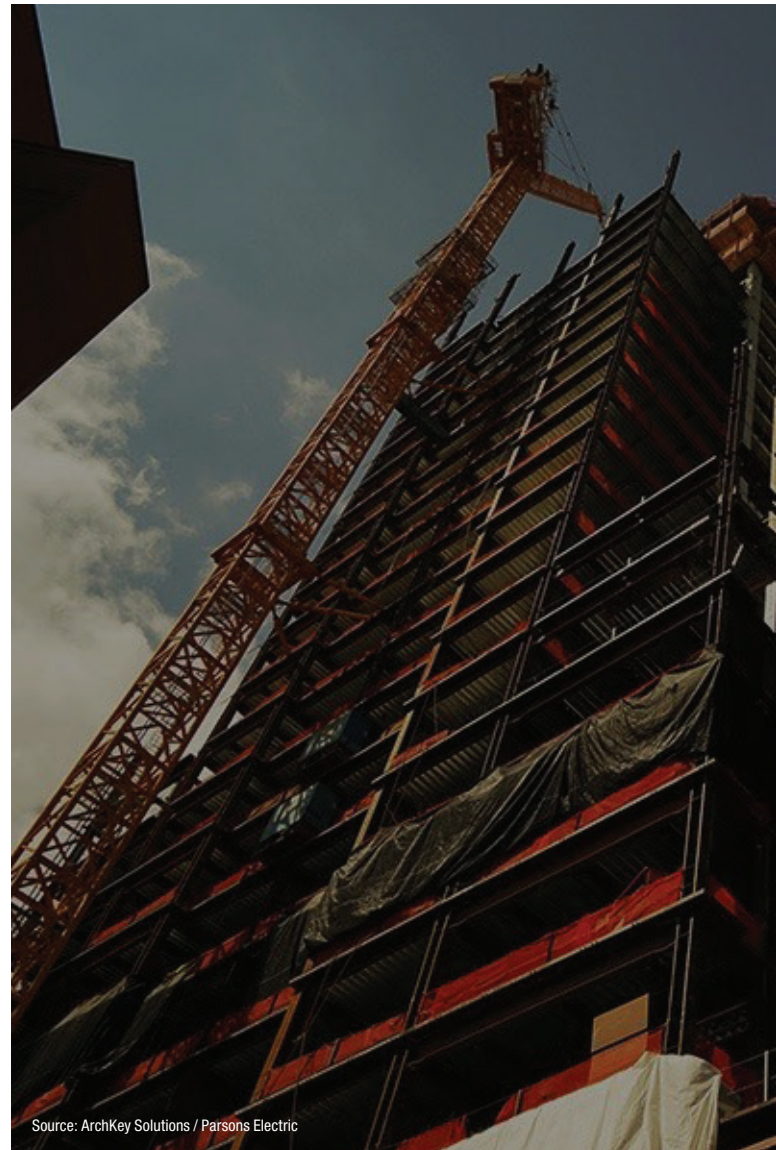
## OVERVIEW

ArchKey, one of the largest privately held specialty trade installation and facilities services companies in the United States, is a leader in designing, building, and maintaining electrical, technologies, and other specialty systems. Our team of over 5,000 works nationally to support our customers and solve problems regardless of their size or complexity. For more information, please visit [www.archkey.com](http://www.archkey.com).

Focus on a jobsite is managing job safety and costs. This becomes more challenging when more and more employees are added to a jobsite to achieve schedule commitments.

As a Lean Construction company, ArchKey/ Parsons Electric's goal is to continuously improve which means looking at the way things are done and finding better, smarter, and faster ways to achieve outcomes without adding cost or sacrificing safety.

**The team observed the high installation time of hangers and set a goal to transition the work into prefabrication** – achieving better quality, reducing cost and employee headcount while on-site as well as improving safety due to reduced lift time required.



## KEY TAKEAWAYS

- ARCHKEY/PARSONS ELECTRIC REFINED INSTALLATION APPROACH FOR HANGERS
- TRANSITIONED MORE WORK INTO THE FABRICATION SHOP
- THE TRANSITION FROM A STANDARD ROD COUPLING HAD MINIMAL WORKFLOW CHANGES
- REDUCED ON-SITE LABOR RATES WITH LESS LABOR LIFT USAGE
- SIGNIFICANT TIME SAVINGS USING DEWALT PUSH-IN COUPLERS VS. THREAD IN PRODUCT\*

ARCHKEY SOLUTIONS / PARSONS ELECTRIC SAVED 110 HOURS IN LABOR INSTALLATION USING DEWALT PUSH-IN COUPLE



## PROJECT DETAILS

The expansion of an existing switching center included adding (2) 4000A services, (2) 2.5MW generators, and over 6,000SF server space. The project team utilized the ArchKey/Parsons Electric prefabrication shop located in Minneapolis, MN, to quickly transport components for installation on the jobsite.

### VZW DATA CENTER PROJECT FACTS

- Location: Bloomington, MN
- Expected Completion: 8/31/2023
- 17,000 Sq Feet
- 558 Labor Hours
- \$15,000,000 Project Value

### PROJECT IMPACT\*

- 36% LABOR COST SAVINGS ON DEWALT HANGER LIFT-RELATED INSTALLATIONS
- 110 INSTALLATION HRS. SAVED IN LIFT TIME USAGE

Source: ArchKey Solutions / Parsons Electric

In situations where a normal threaded rod coupling would be used, or rods are directly threaded into a ceiling or threaded fitting, the DEWALT's Push-In Couplers were utilized to save 36% in labor costs related to lift-related installations on an existing ArchKey/Parsons Electric jobsite. DEWALT's Push-In Couplers were used during the prefab and installation process. ArchKey/Parsons Electric assembled a measured piece of threaded rod with the coupling installed in the jobsite ceiling.

ArchKey/Parsons Electric assembled the supports in their prefabrication shop, brought them to the jobsite, and used the DEWALT's Push-In Couplers to hang the supports. This process enabled the team to significantly reduce onsite labor hours by completely assembling supports off-site, which could then be transported to the site location and be installed.

A labor analysis was performed to determine the savings and found the time saved in using DEWALT's Push-In Couplers was approximately 110 hours between the projected completion time using the standard process vs. the actual completion time. This time savings, combined with the ability to prefabricate the assembled supports, led to a 36% reduction in installation time.

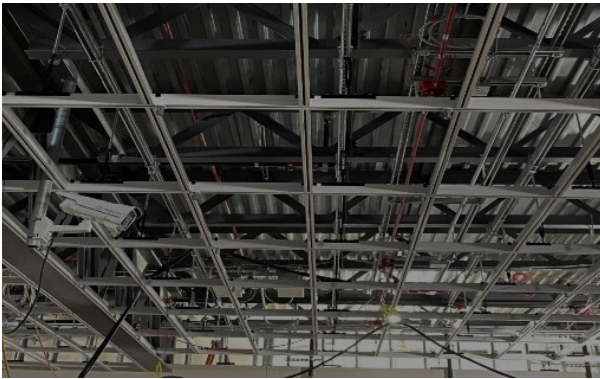
ARCHKEY SOLUTIONS / PARSONS ELECTRIC SAVED 36% IN HANGER-LIFT RELATED LABOR INSTALLATION



## SOLUTION

DEWALT's fully prefabricated hanger rack assembly with Push-In feature was an opportunity for ArchKey/Parsons Electric to achieve their goal. Product ICC-ESL Approval and Engineered safety reduction factors that their Push-In mechanism delivered made the switch easy. The transition from a standard rod coupling had minimal workflow changes.

By partnering with DEWALT, ArchKey/Parsons Electric was able to refine their installation approach for Hangers, transitioning work to and from employees into the fabrication shop which reduced their on-site labor rates and liability, making ArchKey/Parsons Electric a stronger contractor for partners and customer relationships throughout the bid process.



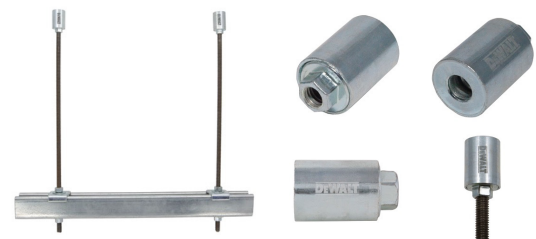
"Pairing what we do in fabrication and making sure it works in the field is so important. From the drawings to fabrication completions, it was simple and easy knowing the rod size and lengths needed to meet spec. Looking forward to working with these Push-In Couplers again in the future."

**Charlie Watkins**  
Fabrication Director  
ArchKey/Parsons Electric

## DEWALT ANCHORS & FASTENERS

DEWALT's Push-In Couplers have one end that does not require turning threaded rod elements for simple placement during installation. These high-performance couplings are ideal for applications such as mounting prefabricated hardware and hanger assemblies.

INNOVATIVE HARDWARE



**Our hanger assembly's installation time dropped by 36%. Not only were we able to be more profitable and complete the project on time but transferring labor towards the fabrication shop limits liability and time spent working at heights."**

**Mike Kunz**  
Construction Executive  
ArchKey Solutions





See why millions of professionals choose DEWALT. From our rich history and proven performance to our focus on innovation and technology. DEWALT continues to design and optimize professional jobsite solutions - tools, accessories and service - to ensure absolute confidence for the toughest conditions. WE are DEWALT, and we are GUARANTEED TOUGH®.



ArchKey Solutions is a Top 10 national provider of construction, facilities and program management solutions. Our legacy spans nearly a century, and today our team is one of the largest and most experienced in the industry, powered by diversity, specialized expertise, and an unrelenting commitment to safety. With locations in California, Minnesota, North Dakota, Missouri and Virginia, we are strategically positioned to deliver The Power of Scale to customers, communities and partners from coast to coast—helping them solve real challenges in new ways, scaling seamlessly to meet their needs, and identifying new opportunities to enrich lives through our work.

See what makes ArchKey the preferred regional and national partner for electrical, technologies and specialty systems at [archkey.com](https://www.archkey.com). Visit [website](https://www.archkey.com).



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A DEWALT Case Study

# PUSH-IN COUPLER

## SIZING OPTIONS

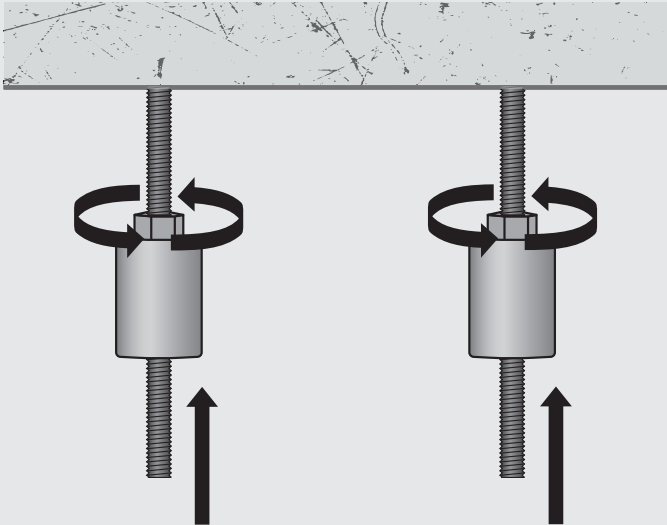
CAT#	SIZE	AVAILABLE LOAD* (TENSION)	QTY-BOX
PFM3613038	3/8 in. Single Thread	4,125 lbs	20
PFM3613012	1/2 in. Single Thread	6,000 lbs	20

\* Allowable load capacities are calculated using an applied safety factor of 3.0.

## INSTALLATION OPTIONS

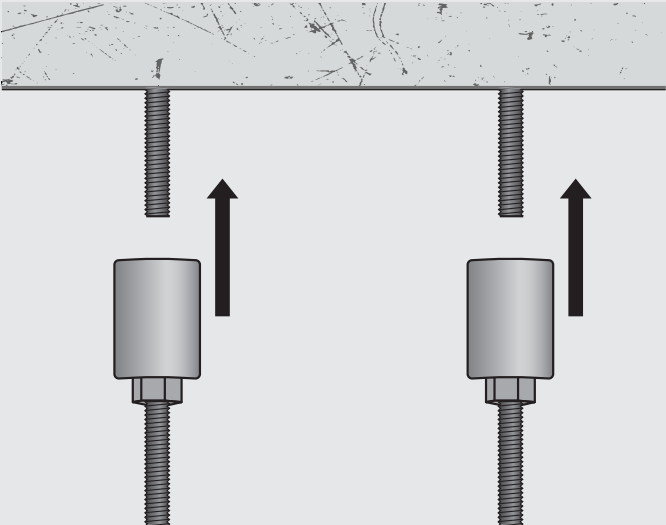
### HEX NUT SIDE UP / PUSH-IN SIDE DOWN

THREAD COUPLERS ONTO HANGING ROD. PUSH PRE-FRABRICATION ASSEMBLY INTO COUPLERS.



### PUSH-IN SIDE UP / HEX NUT SIDE DOWN

THREAD COUPLERS ONTO PRE-FRABRICATION ASSEMBLY. PUSH COUPLERS W/ ASSEMBLY ATTACHED INTO HANGING ROD.



## ANCHOR COMPATIBILITY

### COUPLERS COMPATIBLE WITH 3/8" AND 1/2" DDI+ AND SD1 INSERTS



ROD DIA.	DDI+ PART#	HANGERMATE+ PART#	PUSH-IN COUPLER PART#
3/8"	PFM2511100	PFM1421000	PFM3613038
1/2"	PFM2511110	PFM1421050	PFM3613012

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