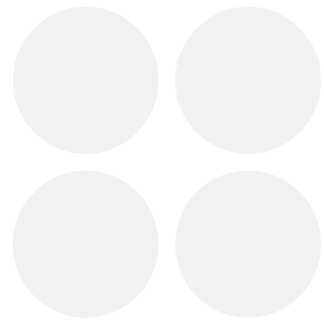


RED·E·DUCT®

Precast Electrical Duct Bank



FAQs



EFFICIENCY ENGINEERED™

Engineered for efficiency. Designed for performance.

Q: What are the main advantages of the RED-E-DUCT Precast Electrical Duct Bank system?

A: RED-E-DUCT offers a number of advantages over traditional cast-in-place installations:

- Significantly less labor and time required
- Improved safety conditions (less time in the trench reduces worker exposure)
- Improved quality of the installed system (conduits properly positioned and joints closed)
- Excellent for deep burials or when conduit must be installed on a slope
- Ideal for road crossings and site access areas (install and backfill in less than one day)
- Ducts are encased in specialized concrete which ensures consistent low thermal resistivity (Rho values)
- Onsite testing requirements are eliminated (conduit and concrete are tested at the Contech® precast facility)

Q: What are the cost savings of using the RED-E-DUCT Precast Duct Bank system vs. a Cast-In-Place installation?

A: Each project should be evaluated for cost savings based on the exact duct bank configuration required, actual site conditions, and the time available to complete the installation. There are many variables, but the following points should be considered when evaluating potential cost savings:






- RED-E-DUCT Precast Duct Bank requires less labor and time to install
- Trenches can be backfilled immediately after installation
- Traffic flow and site access is restored faster
- Less reliance on skilled craft labor
- Installation is not delayed or hampered by cold winter conditions
- Concrete formwork is minimized and needed only for transition areas
- The need for ready mix concrete is reduced or eliminated

Q: What equipment and how many people do I need to install the RED-E-DUCT system? How fast can it be installed?

A: The time to install the precast duct bank varies depending on the product configuration, site and weather conditions, crew size, and contractor preparedness.

The data reference chart (right) assumes that:

- The site and trench is well prepared
- Product is properly staged and ready for installation
- Appropriate equipment is available for installation (backhoe or crane and joint pulling equipment such as a come-a-long)
- The contractor is installing product according to RED-E-DUCT installation instructions
- Standard length straight sections are being installed

Section Configuration	RED-E-DUCT Pieces/Hour	Conduit Install Rate		
		Feet/Hour	Pieces/8Hr Shift	Feet/8Hr Shift
 5 ^H x 5 ^W -4in	7	1,750	56	14,000
 4 ^H x 4 ^W -4in	10	1,600	80	12,800
 3 ^H x 3 ^W -4in	12	1,080	96	8,640
 2 ^H x2 ^W -4in	18	720	144	5,760
 1 ^H x 2 ^W -4in	20	400	160	3,200

Q: What trench preparation is required?

A: RED-E-DUCT Precast Duct Banks are installed on firm bedding in accordance with project specifications. For ease of installation, it is important that the trench bottom be flat. This may be achieved with native soils if they provide a stable, gradable bottom.

Built For Speed

Q: How fast can trenches be closed?

A: Trench excavation and setting of duct bank sections can happen concurrently, and trenches can be backfilled immediately after RED-E-DUCT sections are installed. This results in faster completion and presents the following additional benefits:

- Reducing the length of trench that is open at any one time
- Minimizing rework due to exposure to rain or washouts
- Reducing the time of worker exposure to open trench areas
- Restoring site access faster for reduced traffic control expenses

Q: How are heavy live and dead loads accommodated? Is the product rated for traffic loads?

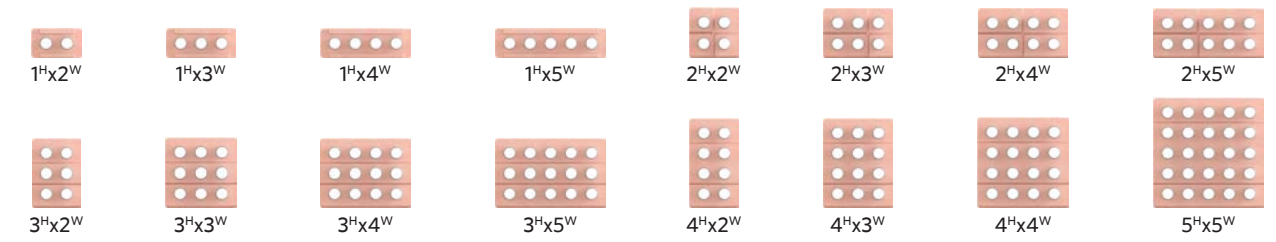
A: Each RED-E-DUCT precast duct bank section has an integrated shear key for protection against shear forces imposed via live or dead loads and/or differential settlement. The product is designed to accommodate HS20 and HL93 loading conditions without reinforcement. Test reports are available on request.

Q: What types of conduit are available?

A: Schedule 40 and Type Precast EB PVC (ETL Listed, conforms to UL 651) conduit is available for use within standard straight sections. Precast Stub-Ups (90-degree vertical risers) are constructed with RTFC (fiberglass) or Galvanized Rigid Steel bends as required by project specifications.

Q: What sizes and configurations does the precast duct bank come in?

A: For 4" conduit, standard configurations are available in 1^Hx2^W to 5^Hx5^W (inclusive). For 6" conduits, standard configurations are available in 1^Hx2^W to 4^Hx4^W (inclusive). Custom configurations utilizing 2", 5", and 8" conduits are also available.

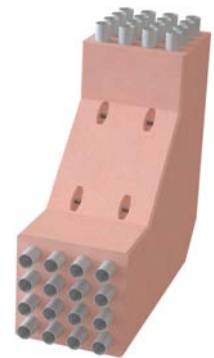


Q: Can vertical changes in duct direction be provided?

A: Yes. We produce standard or custom Stub-Ups (90-degree vertical risers) that include preformed Galvanized Rigid Steel or RTFC (fiberglass) conduits. Typical bend radius is 36 inches but larger radius can be furnished.

Q: How are conduit joints sealed? Are they watertight?

A: Yes, if the project requires water tight joints, the joint system will include a compressible gasket to provide a leak resistant seal. Joint solvents or epoxies are not required. This joint system has been tested in our production facilities to provide equivalent performance to standard solvent joints according to NEMA TC-2 section 5.4. If water tight joints are not required, a slip-fit joint that does not require a gasket or solvents can be supplied.



Efficiency Engineered

Q: Is RED-E-DUCT concrete tested to define thermal resistivity (Rho) values?

A: Yes, third party testing and thermal dryout curves can be provided according to project specifications. RED-E-DUCT concrete delivers superior, consistent thermal resistivity values and can be produced with Rho in ranges less than 60 ($^{\circ}\text{C}\cdot\text{cm}/\text{W}$) to ensure heat efficiently dissipates away from cables. Low thermal resistivity improves heat dissipation and increases the allowable design ampacity.

Q: What is the lead time for RED-E-DUCT material?

A: Lead times are project specific, and are determined according to project specifications, duct configurations required, and total number of RED-E-DUCT sections required. Once information is provided to your Contech representative, specific details can be quickly provided.

Q: How much does RED-E-DUCT cost?

A: All projects have unique requirements. As such, pricing is dependent upon the type and quantity of RED-E-DUCT sections engineered and produced to meet project specific design and delivery requirements. Please contact us with your project requirements and our Engineered Products Application team will help you determine if RED-E-DUCT is the right solution for your project.

RED•E•DUCT[®]

Find out how RED-E-DUCT can improve your next project

Call the Engineered Products Application Team at:
844.733.3828 (844.RED.DUCT)

Or send your request directly to
info@rededuct.com

rededuct.com

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U.S. Patent 20120298244. Other patents pending.