



## Technology Infrastructure • Communications • Wireless

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Structured Cabling Systems is your single source provider for all your communication, technology infrastructure and wireless needs. Structured Cabling Systems is a 100% Veteran owned technical services business that understands your worries and concerns. We are here to help! Our mission is to provide you with outstanding service at affordable rates.

### 5 things you need to know when meeting the challenge of designing your company's network.

#### Infrastructure

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Infrastructure can be thought of as the collection of the following components:

- ❖ Support System
- ❖ Pathways
- ❖ Media
- ❖ Hardware
- ❖ Grounding

#### Cabling

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Aligned with strategic partners like Ortronics, Hubbell, CommScope, Berk-Tek, and Siecor we can provide you with an end to end solution that will exceed your requirements. Structured Cabling Systems excels in meeting the challenge of designing and installing a cabling system that provides the bandwidth for tomorrow's requirements.

- ↪ Voice and Data
- ↪ Fiber Optic
- ↪ Video and CCTV
- ↪ Card Access and CATV
- ↪ Moves, Adds & Changes

#### Fusion Splicing

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Structured Cabling Systems deploys AFL's Fujikura FSM-50S Core alignment Fusion Splicer. The FSM-50S is the fastest field fusion splicer available. We use the FSM-50S for Emergency repair services and new backbone installations. Fusion splicing factory terminated pig tails to fiber optic backbone cables provides better results than field terminations. A typical loss for a fusion splice is -.01db to -.03db depending on the type of fiber that is being spliced. There are two modes of fiber optic cables: Single mode and Multi mode. There are several types of fiber: Non-zero Dispersion Shifted, Dispersion Shifted, Cutoff Shifted and Erbium doped fibers. Single mode has a 125um cladding and an 8-9um core. Multi mode has a 125um cladding and various core sizes 50um, 62.5um, 80um and 100um.

#### Aerial and Underground Construction

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Structured Cabling Systems has both the experience and the equipment to handle the installation of any cabling infrastructure, copper or fiber optic. We take great pride in our knowledge of the industry standards.



Veteran Owned Business

[WWW.4SCS.NET](http://WWW.4SCS.NET)

8679 26 Mile Road Washington, Michigan 48094  
866 754-4SCS Phone 586 589-6688 Fax



## Telephone Systems

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Structured Cabling Systems can provide you with the proper solution based on your individual needs. We offer a complete solution with easy-to-use, built in features such as:

- { Auto Attendant
- { Voice Mail
- { Caller ID
- { Speaker phone
- { Music on hold

## Paging

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Structured Cabling Systems is pleased to present outstanding paging system solutions from Bogen, Quam and Valcom. When you need to reach people within your office or plant complex, Structured Cabling systems will work with you to install an overhead paging system that can be stand alone or easily integrated into you phone system.

## Wireless Network

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Network Access, IP Telephony, Asset location, Fast Roaming, Intrusion detection, High Capacity, Dual Band (802.11a/b/g) Mirrored wireless LAN. We can provide you with the solutions you need to successfully take the next step. We design your wireless network around the applications you wish to deploy current and future.

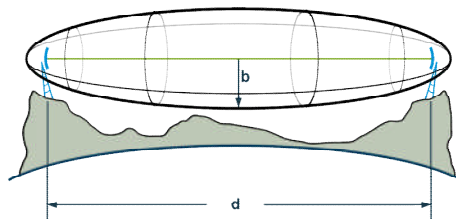
We install and support top names in the Wireless Industry, including:

- 📶 Aruba Networks
- 📶 Cisco Systems
- 📶 Proxim Wireless
- 📶 BridgeWave

## Point to Point Wireless Connectivity

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There is an area called the Fresnel Zone that must be clear. This is an area all around the straight-line connection between the antennas in the shape of an ellipse inside which the radio waves propagate through the atmosphere. In three dimensions the shape looks like a football with the points being the antennas at either end. The size of this zone varies depending on the frequency of the signal and the distance between the two antennas.



With the importance of this link we do not recommend anything less than 100% Fresnel Zone clearance.

- ↪ Rapid Deployment
- ↪ Low Cost of Ownership
- ↪ Advanced Security
- ↪ 99.999% Uptime



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