

# Designing and Installing Fiber Optics to Maximize Your "Smart Community"



## What is Fiber Optic cable?

Fiber Optic cable is made of super-thin filaments of glass that can carry beams of light. Because a fiber-optic cable is light-based, data can be sent through it at the speed of light (almost unlimited capacity). Using a laser transmitter that encodes frequency signals into pulses of light, ones and zeros are sent through the cable. The receiving end of the transmission translates the light signals back into data which can be read by a computer. Because fiber optics are based entirely on beams of light, they are less susceptible to noise and interference than other data-transfer mediums such as copper wires or telephone lines.

1. Core
2. Cladding
3. Buffer
4. Jacket



# How Greenfield Provides Communication Services

Greenfield Offers High Speed Internet, Digital Telephone and Video Packages:

1. Internet speeds starting at 20 Mbps up to 1 Gbps
2. Phone packages starting at \$9 per month
3. Greenfield is a certified dealer for both DirecTV and Dish Network. We can deliver either over fiber if the fiber is in private streets or easements.
4. Greenfield has a California State Video Franchise allowing us to deliver traditional cable TV packages over fiber in public streets.

Marketing and Pricing:

1. Having the best fiber optic infrastructure and services is not enough. A sound marketing strategy is critical to getting the word out about the value being delivered and to encourage (spread the word) for people to live in your new "Smart Community"
2. Greenfield typically includes an Internet package as a bulk offering whether to master planned communities, apartments or condominiums. This allows further price discounts.



# Premium, Concierge Customer Service

Greenfield delivers all fiber optic communication services with the highest level of customer (concierge) service. Concierge service means...

- After hour service calls (nights, weekends)
- No four or six hour service windows, if we say 4 PM we're there at 4 PM.
- 24/7 call center
- Dedicated and knowledgeable field reps for each project
- Attend community functions and events
- Become an integral part of the community
  - Local tech committees
  - Tie security cameras to the fiber network
  - Community websites

# Our Team in Action

Setting a Cabinet for an Ethernet Access Circuit (right)

Installing a below-grade Optical NOC (below)



# Optical Equipment

Optical Transmit Equipment and Fiber Management (right)

Optical Lasers (below)





# Optical Equipment

EDFA and CWDM (right)

Video Headend (below)



# Optical Equipment

Fiber Management (right)

In-Home Structured Wiring Panel (below)





# Outside Plant

Fiber Splice Closure with Slack (right)

Fiber Optic Splicing Trailer (lower right)

On site fiber optic splicing crew (below)



# Back-Up Systems

Mobile Optical Headend (right)

Battery Back Up (below)



# Maintenance and Emergency Response

Maintenance and Emergency Response Crew(right)

Repairing a fiber cut in a 288 count fiber (below)





# Photo Gallery of Communities we Serve

Fairway Canyon in Beaumont (right)



Ivy in Chino (below)



# Photo Gallery of Communities we Serve

College Park in Chino (right)



Lincoln Crossing in Lincoln (below)



## **Projects we Serve in California**

Amerige Heights in Fullerton  
Lincoln Crossing in Lincoln  
Fairway Canyon in Beaumont  
College Park in Chino  
Township 9 in Sacramento  
Northwest Landpark in Sacramento  
Ivy in Chino  
Pacifica in San Juan Capistrano  
Riverbend in Orange  
Veo in Carson  
Sage Park in Gardena  
City of Rancho Murieta  
Cannery Place in Sacramento

## **Home Builders we have worked with**

KB Homes  
Lennar  
Greystone  
Pulte  
New Home Company  
Standard Pacific  
DR Horton  
Harmony  
JD Pierce  
John Lang  
MBK  
Olson Urban Housing  
Pacer  
Pardee  
Pinnacle  
Ryan Homes  
Ryland  
Stratham  
Woodside