When adding fiber to a multi-tenant building it is important to consider not only the immediate deployment, but also the longer term implications of the chosen infrastructure. In other words, will the choice of a splice closure and other associated products deliver immediate benefit as well as create greater opportunity for the sale of fiber-based broadband services well into the future?

In answering this question, some things to consider are:

How much wall space will be consumed by the closure?

Is the solution UL Listed?

Initial material cost and total installed costs?

How easy is the initial installation of the closure?

Are there special tools required? Will it require the use of a heat gun or torch, which may add risk to the structure and/or personnel?

Will the closure interface with microduct simply and efficiently?

How easy is it to access or re-enter the closure for cable adds or subtractions, once installed?

Is the closure designed to provide enhanced services through the use of snap-in passive devices?

Comparison of the ABS Fiber Splice Box (FSB) versus an OSP-Type Closure

The following compares the use of the FSB (Figure A) created by Amphenol Broadband Solutions versus a typical OSP-type closure (Figure B) for a building application.

The FSB-A carries a 12.5″ x 8.0″ footprint, representing a 32% wall space savings when measured against a comparable, commercially available OSP closure (21.0″ x 7″) with comparable capacity. The FSB does not require a special wall mount bracket for secure product placement, but rather may be fastened directly to the wall using included hardware. Additionally, the FSB is UL Listed, an expensive option on OSP closures that is a regulatory requirement for most in-building applications.

A: Fiber Splice Box (FSB) with Microduct Manifold

B: OSP Style Closure

Fiber Splice Box (FSB) Applications in Multi-Tenant Buildings

When contemplating the installation of closures, consider the amount and complexity of special tools, parts, and procedures each solution may require:

FSB
Enclosure
Wall mount screws
Snap-in Splice Trays

OSP Closure
Clamp
Dome and Base
Workstand
Heat shrink
"Scuffing" of cables prior to heat shrink
Branch off clips
Cutting of seals to add more cable
SCOP adhesive pads
Special wall mount bracket
Special tools (e.g. heat gun)
Snap-in splice trays

Feature		Benefit
Fewer Components	➤	Less complexity significantly reduces preparation and installation time in addition to reducing and simplifying technician training.
Aluminum Housing	➤	Lightweight aluminum makes wall mounting easy and fast for a single installer.
Large Flexible Through-Wall Cable Grommets	➤	Allows for easy and quick cable adds and changes along with capacity for up to 2 cables per grommet/port (8 cables total). Through-wall grommets enable damaged housings to be removed and replaced without disrupting existing fiber routing and splices.
Compatible with ABS's Microduct Manifold	➤	Enables integration with microduct tubes often used for fiber patch cord protection in MDU and MTU environments.
Reusable and Simple Cable Clamping	➤	No permanent shrink-tube cable retention. No need to use heat guns or torches to seal secure cables to the enclosure.
216 Tool Access	➤	Provides security and ready access with standard field tools.

Specifications	"A" Size	"D" Size
Size	12.5"H x 8"W x 3.1"D	14.8"H x 14.1"W x 3.1"D
Cable Ports	Four (dual cable brackets allow for a total of 8 cables installed)	
Splice Tray Size	"A" Size (Small)	"M" Size (Medium)
Splice Tray Capacity	3	6
Single Splice Capacity Per Tray (Per enclosure)	24 (72F)	24 (144F)

Ordering Information:

CIFA	Description	ABS Part Number
88120	Fiber Splice Box, Small A Size, (4) Rubber Port Seals w/ (1) Central Strength Member Bracket, (3) Dual Cable Retention Brackets, (1) Ground Feed-Thru, (1) #6AWG Ground Strap, (1) Mini-B Bond, (1) Splice Tray, (2) SF Single Fiber Splice Modules	ASBFSB1023784-0005
89778	Fiber Splice Box, Small A Size, (4) Rubber Port Seals w/ (1) Strength Member Bracket, (3) Dual Cable Retention Brackets, (1) Ground Feed-Thru, (1) #6AWG Ground Strap, (1) Mini-B Bond, (3) Splice Trays w/ (2) SF Single Fiber Modules per Tray	ASBFSB1025415
96638	Fiber Splice Box, Large D Size, (3) Rubber Port Seals w/ (3) Dual Cable Retention Brackets, (1) Compression Seal w/ (1) Single Cable Retention Bracket, (1) Ground Feed-Thru, (1) Medium Splice Tray w/ (2) SF Splice Modules per Tray	ASBFSB1023785-0004
89178	Fiber Splice Box, Large D Size, (4) Rubber Port Seals with (4) Single Cable Retention Brackets, Ground Feed-thru, (6) Medium Splice Trays with (2) SF F Splice Modules per Tray, 144F Splice Capacity	ASBFSB1023785-0006
89927	Microduct Manifold, Kit for 24 Microtubes, with Hardware, for 8.5/10mm Tubes	ASBACC1024757
89179	Microduct Manifold, Kit for 72 Microtubes, with Hardware, for 8.5/10mm Tubes	ASBACC1024758
89780	Microtube Manifold, Kit for 24 Microtubes, with Hardware, for 12.7mm Tubes	ASBACC1025443
89781	Microtube Manifold, Kit for 72 Microtubes, with Hardware, for 12.7mm Tubes	ASBACC1025444

Ordering Information - Accessories:

CIFA	Description	ABS Part Number
88121	Small Splice Tray, Hinge, (2) SF Modules, (12) Sleeve Capacity each module Configuration: ASBUST-AHSFSF	ASBUST1010809-010
96641	Medium Splice Tray, Hinge, (2) SF Modules, (12) Sleeve Capacity each module Configuration: ASBUST-MHSFSF	ASBUST1023694-010
32406	Accessory Kit - Ground Lug with hole, 6" Ground Wire, Mini B-Bond	ASBACC1021223

Ordering Information - Accessories:

CIFA	Description	ABS Part Number
-	Pigtail Plate with Mounting Hardware	ASBACC1023922
-	Cable Port - Conduit Seal	ASBACC1023923
-	Cable Port and Cable Gland	ASBACC1023924
-	Cable Port - Blank	ASBACC1023925
-	SC/APC Pigtails 1-6 Accessory	ASBACC1023927
-	SC/APC Pigtails 7-12 Accessory	ASBACC1023926
-	SC/UPC Pigtails 1-6 Accessory	ASBACC1023936
-	SC/UPC Pigtails 7-12 Accessory	ASBACC1023935
-	LC/UPC Pigtails two sets 1-12 Accessory	ASBACC1023930
-	LC/APC Pigtails two sets 1-12 Accessory	ASBACC1023931
-	LC/UPC Pigtails 1-12 Accessory	ASBACC1023928
-	LC/APC Pigtails 1-12 Accessory	ASBACC1023929
-	SC/UPC Simplex SM 6PK Panel Assembly	ASBMMB1021482
-	SC/APC Simplex SM 6PK Panel Assembly	ASBMMB1021483
-	LC/UPC Duplex SM 6PK Panel Assembly	ASBMMB1021485
-	LC/APC Duplex SM 6PK Panel Assembly	ASBMMB1021486
-	SC/UPC Simplex SM 12PK Panel Assembly	ASBMMB1021488
-	SC/APC Simplex SM 12PK Panel Assembly	ASBMMB1021489
-	LC/UPC Duplex SM 12PK Panel Assembly	ASBMMB1023933
-	LC/APC Duplex SM 12PK Panel Assembly	ASBMMB1023934
-	Blank, Panel Assembly, Narrow Width	ASBMMB1024709