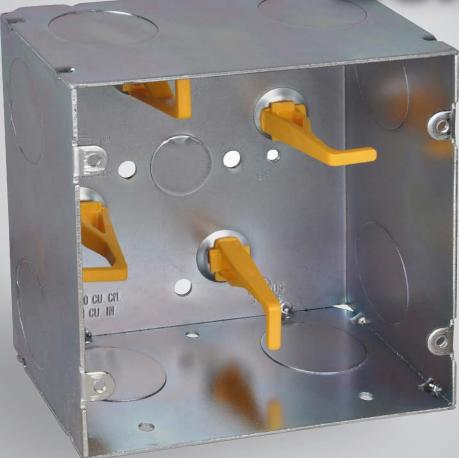
**Telecommunication** and Fire Signal Boxes

> 5 SQUARE<sup>™</sup> **Boxes**



Thomas & Betts. Your best connection for innovative solutions.

# Introducing 5 SQUARE Boxes



#### Install Peace of Mind.

When hospitals, universities and government agencies require outlet boxes to increase safety, ensure minimum bend radius requirements and provide significant labor savings, they specify 5 SQUARE™ Telecommunication and Fire Signal Boxes.

Create a robust and unrivaled infrastructure for the life of the facility – it's time for an upgrade to 5 SQUARE™ Boxes.

#### **5 SQUARE™ Fire Signal Boxes**

















8	218	1-1	234	-CVR
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5 SQUARE™ Fire Signal Boxes				
Cat. No.	Bracket	Knockouts	Red	Std. Ctn.
2-7/8 in. Deep, 67 Cub	ic Inches			
82181-12-1	_	4 sides: (1) 1/2 in. and (2) 1 in.; back: (3) 1/2 in. and (2) 3/4 in.	_	20
82181-1234	_	4 sides: (1) 1/2 in. and (2) 1/2 in. / 3/4 in.; back: (3) 1/2 in. and (2) 1/2 in. / 3/4 in.	_	20
82181-1234-1	-	4 sides: (1) 1/2 in., (1) 1/2 in. / 3/4 in. and (1) 1 in.; back: (3) 1/2 in. and (2) 3/4 in.		20
82181-1234-RD*	-	4 sides: (1) 1/2 in. and (2) 1/2 in. / 3/4 in.; back: (3) 1/2 in. and (2) 1/2 in. / 3/4 in.	Yes	20
82181-12-1-CV	CV	3 sides: (1) 1/2 in. and (2) 1 in.; back: (3) 1/2 in. and (2) 3/4 in.	_	20
82181-1234-CV	CV	3 sides: (1) 1/2 in. and (2) 1/2 in. / 3/4 in.; back: (3) 1/2 in. and (2) 1/2 in. / 3/4 in.	_	20
82181-1234-1-CV	CV	3 sides: (1) 1/2 in., (1) 1/2 in. / 3/4 in. and (1) 1 in.; back: (3) 1/2 in. and (2) 3/4 in.	_	20
82181-1234-CVRD*	CV	3 sides: (1) 1/2 in., (1) 1/2 in. / 3/4 in. and (1) 1 in.; back: (3) 1/2 in. and (2) 3/4 in.	Yes	20

<sup>\*</sup> Grounding screws not included. For low voltage application only.

#### 5 SQUARE™ to 4 in. Square Box Adapters



82-52E-0



82-52E-1



82-52E-1/4



82-52E-5/8



82-52E-1/2



82-52E-1-1/4



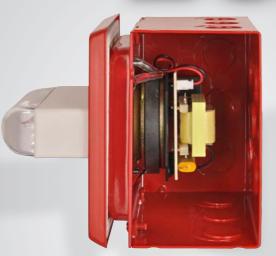
82-52E-3/4



82-52E-1-1/2

5 SQUARE™ to 4 in. Square Box Adapters				
Cat. No.	Raised (in.)	Volume (Cu. in.)	Std. Ctn.	
82-52E-0	Flat	_	20	
82-52E-1/4	1/4	3.5	20	
82-52E-1/2	1/2	7.2	20	
82-52E-5/8	5/8	9.1	20	
82-52E-3/4	3/4	10.8	20	
82-52E-1	1	14.7	10	
82-52E-1-1/4	1-1/4	18.0	10	
82-52E-1-1/2	1-1/2	21.0	10	

## Fire Signal Boxes





## All signals point to increased safety and savings.

Ground faults and short circuits in fire alarm systems often stem from the use of a standard electrical box and can lead to severe consequences. Avoid this hazard with a 5 SQUARE™ Fire Signal Box (5 in. x 5 in. x 2.875 in.). Its increased size and space added around the perimeter of an appliance helps to prevent ground faults and short circuits.

A 5 SQUARE™ Fire Signal Box also dramatically reduces stress on terminals, resulting in fewer damaged appliances. In addition, a major fire signal manufacturer allows a full complement of conductors to be routed in the box per C.E.C.\* table 22, part 1. This allows additional circuits and zones to be pulled through the 5 SQUARE™ Fire Signal Box, potentially reducing conduit. On a large construction project, these savings can really add up!

- > Twice the volume as standard electrical boxes
- → Save on labor, increase profits
- > Eliminate troubleshooting time and costs
- > Fully upgradeable system
- Available in pregalvanized steel or red painting

#### Increase capacity

5 SQUARE™ Boxes offer more than double the cubic inch capacity of a standard 4 in.-square deep box, making it faster and easier to route wiring and make terminations in the box.

#### Save labor

Turn a two-man job
into a one-man job
by storing the slack cable
loop in the box
for easy access by a single
technician when terminating
communications cables.

#### Reduce troubleshooting

The extra room in the 5 SQUARE™ Box dramatically reduces the likelihood of ground faults and short circuits when installing large fire alarm devices.

### Break out of the box.

Electricians have long struggled with small, cramped 4 in. square boxes and the time it takes to get a wiring job done using them.

But Thomas & Betts provides solutions that give you the space you've always needed; solutions that enable you to break out of the standard box.

## Create a robust, cost-effective infrastructure for the life of facility.

5 SQUARE™ Boxes (5 in. x 5 in. x 2.875 in.) provide up to 88 cu. in. of interior volume — more than double the volume of a 4 in.-square deep box. The increased size of 5 SQUARE™ Fire Signal Boxes helps eliminate ground faults and short circuits, and 5 SQUARE™ Telecommunication Boxes guarantee minimum bend radius, now and for future transmission rate increases over both copper and fiber optic cable.

What's more, 5 SQUARE™ Boxes save money — and lots of it. In commercial construction, labor cost is the single largest expense for an electrical contractor. Our 5 SQUARE™ Boxes can save contractors up to 50% in labor costs. By storing the recommended slack loop of communications cabling in the box instead of in a closet or drop ceiling, terminating cables at the box becomes a job for a single technician rather than requiring a second technician to assist in pulling cables out the box for termination and then back into the conduit upon completion. This becomes even more critical in health care facilities, where opening ceilings is strongly discouraged due to contamination.

In addition, our 5 SQUARE™ Boxes provide equipment savings. Compared to standard electrical boxes, the larger size of 5 SQUARE™ Boxes enables more circuits and zones to be pulled through, which potentially reduces conduit and installation costs.

## Telecommunication Boxes





## No more getting bent out of shape worrying about cable bend radius.

With its increased size over standard boxes

– and a slack cable/service loop in the box

– a 5 SQUARE™ Telecommunication Box
incorporates a cable management system
guaranteeing minimum bend radius now and
for future transmission rate increases.

A 5 SQUARE® Telecommunication Box supports copper CAT5e, CAT6, CAT6A, CAT7, CAT7A and fiber optic cables as well as expected future generations of cables. The slack cable/service loop in the box reduces labor during installation as well as during maintenance, which further increases cost savings.

- Integrated cable management posts prevent kinked and over-bent cables to ensure proper data transmission.
- → BICSI-recommended slack cable loop eliminates the need for a second technician in a remote location to assist in pulling the cable out of the box for connector termination.
- → Save up to 50% in labor.
- Eliminate the need to remove ceiling tiles to access the slack cable loop, preventing damage and debris.

#### **5 SQUARE™ Telecommunication Boxes**













82181T-1-114

82181T-1234-1

82181T-1

82181T-1-114-CV

82181T-1234-1-CV

82181T-1-CV

5 SQUARE™ Telecommunication Boxes			
Cat. No.	Bracket	Knockouts	Std. Ctn.
2-7/8 in. Deep, 64 Cubic Inches, Cable Management Posts			
82181T-1-114	_	4 sides: (1) 1 in. and (1) 1-1/4 in.; back: (1) 1/2 in.	20
82181T-1234-1	_	4 sides: (1) 1/2 in., (1) 3/4 in. and (1) 1 in.; back: (1) 1/2 in.	20
82181T-1	_	4 sides: (2) 1 in.; back: (1) 1/2 in.	20
82181T-1-114-CV	CV	3 sides: (1) 1 in. and (1) 1-1/4 in.; back: (1) 1/2 in.	20
82181T-1234-1-CV	CV	3 sides: (1) 1/2 in., (1) 3/4 in. and (1) 1 in.; back: (1) 1/2 in.	20
82181T-1-CV	CV	3 sides: (2) 1 in.; back: (1) 1/2 in.	20

NOTE: Use on Class 2 and Class 3 remote control, signaling and power-limited circuits only.

#### **5 SQUARE™ Device Covers**



82C-1G-0



32C-1G-1-1/4



82C-2G-5/8



82C-1G-1/4



82C-1G-1-1/2



82C-2G-3/4



82C-1G-1/2



82C-1G-2



82C-2G-1



82C-1G-5/8



82C-2G-0



82C-2G-1-1/4



82C-1G-3/4



82C-2G-1/4



82C-2G-1-1/2



82C-1G-1



82C-2G-1/2



82C-2G-2

5 SQUARE™ Device Covers				
Cat. No.	Raised (in.)	Volume (Cu. in.)	Std. Ctn.	
Single Gang				
82C-1G-0	Flat	1	20	
82C-1G-1/4	1/4	1.5	20	
82C-1G-1/2	1/2	3.5	20	
82C-1G-5/8	5/8	4.3	20	
82C-1G-3/4	3/4	5.3	20	
82C-1G-1	1	6.8	10	
82C-1G-1-1/4	1-1/4	8.5	10	
82C-1G-1-1/2	1-1/2	10.5	10	
82C-1G-2	2	14.0	10	

Cat. No.	Raised (in.)	Volume (Cu. in.)	Std. Ctn.		
Double Gang	Double Gang				
82C-2G-0	Flat	_	20		
82C-2G-1/4	1/4	3.0	20		
82C-2G-1/2	1/2	6.3	20		
82C-2G-5/8	5/8	7.8	20		
82C-2G-3/4	3/4	9.5	20		
82C-2G-1	1	12.8	10		
82C-2G-1-1/4	1-1/4	17.0	10		
82C-2G-1-1/2	1-1/2	20.0	10		
82C-2G-2	2	26.0	10		

#### Accessories

#### 5 SQUARE™ Blank Covers





5 SQUARE™ Blank Covers				
Cat. No.	Red	Std. Ctn.		
82C-1	_	20		
82C-1-RD	Yes	20		

#### **5 SQUARE™ Box Accessories**





H16S-82-3

H24S-82-4

5 SQUARE™ Box Accessories			
Cat. No.	Description	Std. Ctn.	
H16S-82-3	Support Bracket for 5 SQUARE™, 4 in. and 4-11/16 in. Boxes; 16 in. Stud Centers	20	
H24S-82-4	Support Bracket for 5 SQUARE™, 4 in. and 4-11/16 in. Boxes; 24 in. Stud Centers	20	
FSS-82	Far-Side Support	20	

Atlantic Provinces
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