



- Supported by the Mission Critical Permanent Link Fiber Warranty
- Flexible Cable Construction to Facilitate Deployment and Dress-Out
- 10 GbE Application Assurance for all Standards-Supported Lengths
- ROHS Compliant Flame-Retardant Cable Design

FEATURES

- Flexible, easy-strip fiber coatings for contractor-friendly connector field termination
- Compact diameter to minimize cable congestion, and maximize pathway utilization
- 10GBase-S delivery to 550-meter distances using OM4 laser optimized multimode fiber
- Fibers supported: OM1, OM2, OM3, OM4, SM
- Non-Conductive design, available in riser (OFNR), Plenum (OFNP), and LSZH versions

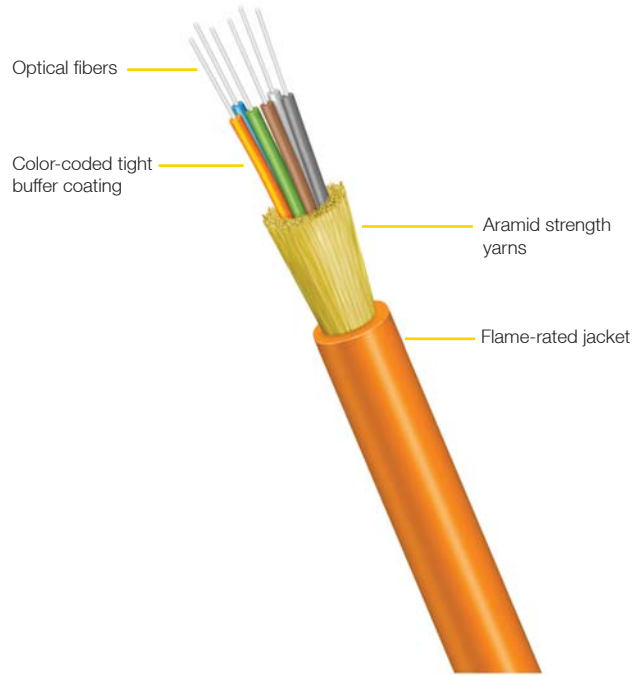
SPECIFICATIONS

- Strand count: 2 to 24 strands
- Fiber coating: Color coded 900 µm PVC tight buffer over 250 µm acrylate
- Temperature Range
 - Storage: -40° F to +176° F (-40° C to +80° C)
 - Installation: 14° F to +122° F (-10° C to +50° C)
 - Operation: -4° F to +176° F (-20° C to +80° C)
- Mechanical and Dimensional: See Chart
- Attenuation / Bandwidth / Distance: See Spec

STANDARDS

- Telcordia GR-409
- ANSI/ICEA S-83-596
- TIA-492-series detailed fiber requirements
- TIA-568-C-series requirements
- Riser Cables: UL 1666/CSA FT-4
- Plenum Cables: NFPA-262/UL910/CSA FT-6

HUBBELL Indoor Tight Buffer Distribution
OptiChannel Fiber Cable



Hubbell's **OptiChannel® HFC1 Series Indoor Tight Buffered Distribution Fiber Cable** provides reliable, high bandwidth optical network performance, easy field termination, and compact, flame-retardant design for space-saving installations. Premium quality optical fiber is used in all of Hubbell's **OptiChannel** fiber cables, which are fully supported by the **HUBBELL MISSION CRITICAL®** 25-year warranty.

CABLE JACKET AND BUFFER COLOR CODES

- Orange: 62.5 µm OM1 and 50 µm OM2 Multimode
- Aqua: 50 µm OM3 and 50 µm OM4 Laser Optimized Multimode
- Yellow: Singlemode
- Buffer Position/Color Codes: 1-Blue, 2-Orange, 3-Green, 4-Brown, 5-Slate, 6-White, 7-Red, 8-Black, 9-Yellow, 10-Violet, 11-Rose, 12-Aqua

APPLICATIONS

- High capacity intra-building lan, backbone, and horizontal optical cabling infrastructure
- Data center, LAN and Storage Area Network optical cabling infrastructure
- Bandwidth-intensive trunk lines for high speed data and video traffic
- Extended distance, non-conductive data links
- Commercial, medical, government and education facilities





ORDERING INFORMATION

Catalog Number	HFC1XXXRN
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XXX = Fiber Count (2, 4, 6, 8, 12 strands)

R = 'R' for Riser, 'P' for Plenum, 'Z' for LSZH

N = '6' for 62.5 μm OM1 Multimode

'5' for 50 μm OM2 Multimode

'3' for 50 μm OM3 Multimode 10 GbE

'4' for 50 μm OM4 Multimode 10 GbE

'S' for Singlemode

Example: **HFC1012R5**

DELIVERY

All fiber cables are priced and sold by meters. To convert feet to meters, multiply feet by 3.281. Spool size varies by cable diameter and spooled length. Minimum order quantity is 1,000 meters. Cable is delivered by length ordered. Excess cable on spool is excluded from the length ordered.

Note: See Hubbell HFC1M-Series Multi-Unit Distribution Cables for fiber strand counts greater than 12 strands. Special strand counts available on a custom made-to-order basis. Contact Hubbell Premise Wiring for quote and delivery.

CABLE DESIGN INFORMATION

HFC1 Series: Indoor Tight Buffer Riser OFNR, FT-4 Rated

Fiber Count	Cable Diameter in(mm)	Cable Weight lb/kft(kg/km)	Bend Radius (With Load) in(cm)	Bend Radius (No Load) in(cm)	Max Pulling Load lbs(newtons)	Max Operation Load lbs(newtons)
2	0.19 (4.8)	15 (22)	4 (10)	3 (8)	150 (660)	45 (200)
4	0.22 (5.6)	19 (28)	4 (10)	3 (8)	150 (660)	45 (200)
6	0.24 (6.0)	21 (31)	5 (13)	4 (10)	150 (660)	45 (200)
8	0.25 (6.2)	23 (34)	5 (13)	4 (10)	150 (660)	45 (200)
12	0.28 (7.0)	30 (45)	6 (15)	4 (10)	150 (660)	45 (200)

HFC1 Series: Indoor Tight Buffer Plenum OFNP, FT-6 Rated

2	0.17 (4.2)	9 (13)	3 (8)	3 (8)	100 (444)	33 (145)
4	0.17 (4.3)	14 (21)	3 (8)	3 (8)	100 (444)	33 (145)
6	0.19 (4.7)	15 (22)	4 (10)	3 (8)	100 (444)	33 (145)
8	0.20 (5.0)	18 (27)	4 (10)	3 (8)	100 (444)	33 (145)
12	0.23 (5.8)	22 (33)	5 (13)	4 (10)	100 (444)	33 (145)

HFC1 Series: Indoor Tight Buffer LSZH

2	0.22 (5.6)	15 (22)	4 (10)	3 (8)	150 (660)	45 (200)
4	0.22 (5.6)	21 (31)	5 (13)	3 (8)	150 (660)	45 (200)
6	0.24 (6.0)	22 (32)	5 (13)	4 (10)	150 (660)	45 (200)
8	0.25 (6.2)	24 (36)	5 (13)	4 (10)	150 (660)	45 (200)
12	0.28 (7.0)	31 (46)	6 (14)	4 (10)	150 (660)	45 (200)

ACCESSORIES

Description	Catalog Number
Fiber Buffer Strip Tool, 250/900 μm	OFSTRIP2
OPTICHANNEL ® Termination Kit	OFTK03C
Field Termination Kit	OFTK05
Precision Cleave Tool	OFCLV4
Multimode Cleave Tool	OFCLV3

TYPICAL APPLICATION

- Verify the network application is supported for the installed distance.
- Do not exceed maximum loading and minimum bend radius limits.
- Use proper tools for stripping and dressing cable to avoid fiber damage.
- Adhere to good installation practices, avoiding kinks, crushing, and abrasion.
- Adhere to code requirements for pathway fill.

INTEGRATED SOLUTIONS



Backbone and Horizontal Cross-Connect Facilities

- **OPTICHANNEL**® Patch Panels, Cords, and Enclosures
- **NEXTFRAME**® and **I-FRAME**® Racks, Enclosures, Cable Management, and Ladder Rack
- **PROclick**™, 2Click, and **OPTICHANNEL**® Connectors



Delivery Systems Solutions

- SystemOne, Poke Throughs, Floor Boxes
- HBL-Series Metal Raceway and PolyTrak Raceway





- Supported by the Mission Critical Permanent Link Fiber Warranty
- Flexible Gel-Free Cable Construction to Facilitate Deployment and Dress-Out
- 10 GbE Application Assurance for all Standards-Supported Lengths
- ROHS Compliant Flame-Retardant Cable Design

FEATURES

- Flexible, easy-strip fiber coatings for contractor-friendly connector field termination
- Gel-free water blocking binders provide easy, no-mess field termination
- 10GBase-S delivery to 550-meter distances using OM4 laser optimized multimode fiber
- Fibers supported: OM1, OM2, OM3, OM4, SM
- Riser (OFNR), and LSZH versions suitable for by-passing entrance transition points

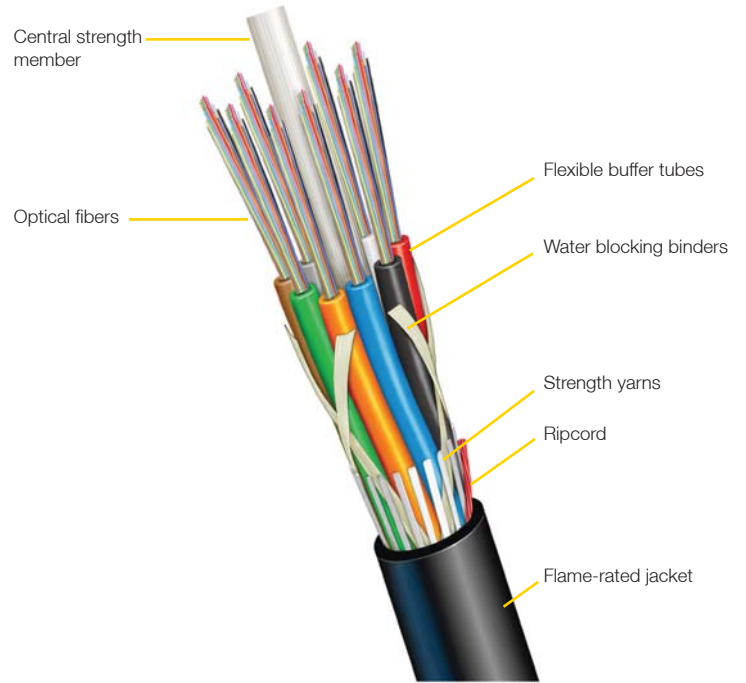
SPECIFICATIONS

- Strand count: 2 to 48 strands
- Fiber coating: Color coded 250 µm acrylate
- Temperature Range
 - Storage: -40° F to +176° F (-40° C to +80° C)
 - Installation: 14° F to +176° F (-10° C to +80° C)
 - Operation: -40° F to +176° F (-20° C to +80° C)
- Mechanical and Dimensional: See Chart
- Attenuation / Bandwidth / Distance: See spec

STANDARDS

- Telcordia GR-409 and GR-20
- ANSI/ICEA S-87-640
- ANSI/ICEA S-104-696
- TIA-492 and TIA-568-C-series requirements
- Riser Cables: UL 1666/CSA FT-4
- Plenum Cables: NFPA-262/UL910/CSA FT-6

HUBBELL **Indoor/Outdoor Loose Tube Fiber Cable**
OptiChannel



Hubbell's **OptiChannel® HFC2 Series Indoor/Outdoor Loose Tube Fiber Cable** provides a versatile, high bandwidth optical cabling solution, with easy field termination, and compact, flame-retardant design for space-saving installations. Premium quality optical fiber is used in all of Hubbell's OptiChannel fiber cables, which are fully supported by the Hubbell **MISSION CRITICAL®** 25-year warranty.

CABLE JACKET AND BUFFER COLOR CODES

- Jacket: Black dielectric, all fiber types
- Buffer Tube Color Codes*: Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
 - * Same colors with black stripe after 12 tubes
- Buffer Position/Color Codes: 1-Blue, 2-Orange, 3-Green, 4-Brown, 5-Slate, 6-White, 7-Red, 8-Black, 9-Yellow, 10-Violet, 11-Rose, 12-Aqua

APPLICATIONS

- Inter-building/campus WAN backbone cabling
- Aerial lashed, duct, or direct burial deployments
- Data center main distribution to remote facilities
- High bandwidth trunk Lines for data and video traffic
- Extended distance, non-conductive media links
- Commercial, Medical, Government and Education facilities





ORDERING INFORMATION

Catalog Number	HFC2XXXRNBK
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XXX = Fiber Count (2, 4, 6, 8, 12, 24, 48 strands)

R = 'R' for Riser, 'Z' for LSZH

N = '6' for 62.5 μm OM1 Multimode

'5' for 50 μm OM2 Multimode

'3' for 50 μm OM3 Multimode 10 GbE

'4' for 50 μm OM4 Multimode 10 GbE

'S' for Singlemode

Example: HFC2012R5BK

DELIVERY

All fiber cables are priced and sold by meters. To convert feet to meters, multiply feet by 3.281. Spool size varies by cable diameter and spooled length. Minimum order quantity is 1,000 meters. Cable is delivered by length ordered. Excess cable on spool is excluded from the length ordered.

Note: Strand counts 72 to 288 strands available on a custom make-to-order basis. Contact Hubbell Premise Wiring for quote and delivery.

CABLE DESIGN INFORMATION

HFC2 Series: Indoor/Outdoor Loose Tube, Single Jacket, Riser OFNR and LSZH

Fiber Count	No. of Buffer Tubes	No. of Fibers Per Tube	Cable Diameter in(mm)	Cable Weight lb/kft(kg/km)	Bend Radius (With Load) in(cm)	Bend Radius (No Load) in(cm)	Max Pulling Load lbs(newtons)	Max Operation Load lbs(newtons)
2 to 60	5	12	0.42 (10.6)	74 (110)	8 (20)	4 (10)	600 (2700)	200 (890)
62 to 72	6	12	0.45 (11.4)	82 (122)	9 (23)	5 (12)	600 (2700)	200 (890)
74 to 84	7	12	0.50 (12.6)	100 (149)	9 (23)	5 (12)	600 (2700)	200 (890)
86 to 96	8	12	0.54 (13.8)	118 (175)	10 (26)	5 (12)	600 (2700)	200 (890)
98 to 108	9	12	0.57 (14.5)	130 (195)	11 (27)	6 (15)	600 (2700)	200 (890)
110 to 120	10	12	0.51 (15.4)	149 (222)	11 (27)	6 (15)	600 (2700)	200 (890)
122 to 132	11	12	0.54 (16.3)	167 (248)	12 (31)	6 (15)	600 (2700)	200 (890)
134 to 144	12	12	0.57 (17.2)	184 (274)	14 (35)	7 (18)	600 (2700)	200 (890)
146 to 264	22	12	0.76 (19.3)	244 (366)	15 (39)	7 (18)	600 (2700)	200 (890)
266 to 288	24	12	0.80 (20.3)	269 (404)	16 (41)	8 (20)	600 (2700)	200 (890)

ACCESSORIES

Description	Catalog Number
Fiber Buffer Strip Tool, 250/900 μm	OFSTRIP2
OPTICHANNEL ® Termination Kit	OFTK03C
Field Termination Kit	OFTK05
Fiber Termination B/O Tube Clamp	OFCLMP1
Precision Cleave Tool	OFCLV4
Multimode Cleave Tool	OFCLV3
6 Fiber 900 μm Break Out Tube Kit	OFBOKT6
12 Fiber 900 μm Break Out Tube Kit	OFBOKT12

TYPICAL APPLICATION

- Verify the network application is supported for the installed distance.
- Do not exceed maximum loading and minimum bend radius limits.
- Use proper tools for stripping and dressing cable to avoid fiber damage.
- Adhere to good installation practices, avoiding kinks, crushing, and abrasion.
- Adhere to code requirements for direct burial and pathway fill.

INTEGRATED SOLUTIONS



Backbone and Horizontal Cross-Connect Facilities

- OPTICHANNEL**® Patch Panels, Cords, and Enclosures
- NEXTFRAME**® and **I-FRAME**® Racks, Enclosures, Cable Management, and Ladder Rack
- PROclick**™, 2Click, and **OPTICHANNEL**® Connectors



Delivery Systems Solutions

- SystemOne, Poke Throughs, Floor Boxes
- HBL-Series Metal Raceway and PolyTrak Raceway





- Supported by the Mission Critical Permanent Link Fiber Warranty
- Flexible Gel-Free Cable Construction to Facilitate Deployment and Dress-Out
- 10 GbE Application Assurance for all Standards-Supported Lengths
- ROHS Compliant Design

FEATURES

- Flexible, easy-strip fiber coatings for contractor-friendly connector field termination
- Gel-free water blocking binders provide easy, no-mess field termination
- 10GBase-S delivery to 550-meter distances using OM4 laser optimized multimode fiber
- Fibers supported: OM1, OM2, OM3, OM4, SM
- Rugged polyethylene jacket for outdoor use

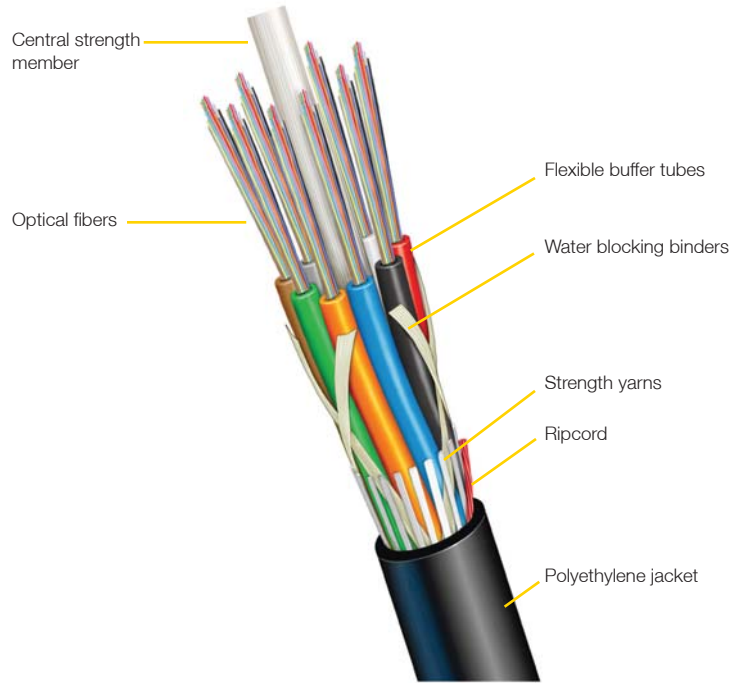
SPECIFICATIONS

- Strand count: 2 to 48 strands
- Fiber coating: Color coded 250 µm acrylate
- Temperature Range
 - Storage: -40° F to +167° F (-40° C to +75° C)
 - Installation: -22° F to +140° F (-10° C to +60° C)
 - Operation: -40° F to +158° F (-40° C to +70° C)
- Mechanical and Dimensional: See Chart
- Attenuation / Bandwidth / Distance: See spec

STANDARDS

- Telcordia GR-20
- ANSI/ICEA S-87-640
- ANSI/ICEA S-104-696
- TIA-492 and TIA-568-C-series requirements
- TIA-758 OSP cabling requirements

HUBBELL OptiChannel Outdoor Loose Tube Fiber Cable



Hubbell's **OptiChannel® HFC3 Series Outdoor Loose Tube Fiber Cable** provides a rugged and versatile high bandwidth optical cabling solution, with easy field termination, and compact, water resistant design for space-saving installations. Water-blocking binders that swell to resist moisture provide a gel-free outdoor-compliant cable solution. Premium quality optical fiber is used in all of Hubbell's OptiChannel fiber cables, which are fully supported by the Hubbell **MISSION CRITICAL®** 25-year warranty.

CABLE JACKET AND BUFFER COLOR CODES

- Jacket: Black dielectric, all fiber types
- Buffer Tube Color Codes*: Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
 - * Same colors with black stripe after 12 tubes
- Buffer Position/Color Codes: 1-Blue, 2-Orange, 3-Green, 4-Brown, 5-Slate, 6-White, 7-Red, 8-Black, 9-Yellow, 10-Violet, 11-Rose, 12-Aqua

APPLICATIONS

- Inter-building/campus WAN backbone cabling
- Metropolitan Area Networks, Service Provider Networks
- Aerial lashed, duct, or direct burial deployments
- Data center main distribution to remote facilities
- High bandwidth trunk Lines for data and video traffic
- Extended distance, non-conductive media links
- Commercial, Medical, Government and Education facilities





ORDERING INFORMATION

Catalog Number	HFC3XXXBKN
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XXX = Fiber Count (4, 6, 8, 12, 24, 48 strands)

Example: **HFC3012BK3**

- N** = '6' for 62.5 μm OM1 Multimode
- '5' for 50 μm OM2 Multimode
- '3' for 50 μm OM3 Multimode 10 GbE
- '4' for 50 μm OM4 Multimode 10 GbE
- 'S' for Singlemode

DELIVERY

All fiber cables are priced and sold by meters. To convert feet to meters, multiply feet by 3.281. Spool size varies by cable diameter and spooled length. Minimum order quantity is 1,000 meters. Cable is delivered by length ordered. Excess cable on spool is excluded from the length ordered.

Note: Strand counts 72 to 288 strands available on a custom make-to-order basis. Contact Hubbell Premise Wiring for quote and delivery.

CABLE DESIGN INFORMATION

HFC3 Series: Outdoor Loose Tube, Single Jacket

Fiber Count	No. of Buffer Tubes	No. of Fibers Per Tube	Cable Diameter in(mm)	Cable Weight lb/kft(kg/km)	Bend Radius (With Load) in(cm)	Bend Radius (No Load) in(cm)	Max Pulling Load lbs(newtons)	Max Operation Load lbs(newtons)
2 to 60	5	12	0.42 (10.6)	53 (79)	8 (20)	4 (10)	600 (2700)	180 (800)
62 to 72	6	12	0.45 (11.4)	63 (94)	9 (23)	5 (12)	600 (2700)	180 (800)
74 to 84	7	12	0.49 (12.3)	72 (107)	10 (26)	5 (12)	600 (2700)	180 (800)
86 to 96	8	12	0.53 (13.4)	82 (122)	11 (27)	5 (12)	600 (2700)	180 (800)
98 to 108	9	12	0.56 (14.2)	90 (134)	11 (27)	6 (15)	600 (2700)	180 (800)
110 to 120	10	12	0.60 (15.1)	99 (147)	12 (31)	6 (15)	600 (2700)	180 (800)
122 to 132	11	12	0.63 (16.1)	109 (162)	13 (34)	6 (15)	600 (2700)	180 (800)
134 to 144	18	12	0.67 (16.9)	126 (187)	13 (34)	7 (18)	600 (2700)	180 (800)
146 to 264	22	12	0.74 (18.9)	153 (228)	15 (39)	7 (18)	600 (2700)	180 (800)
266 to 288	24	12	0.77 (19.6)	167 (248)	15 (39)	8 (20)	600 (2700)	180 (800)

ACCESSORIES

Description	Catalog Number
Fiber Buffer Strip Tool, 250/900 μm	OFSTRIP2
OPTICHANNEL ® Termination Kit	OFTK03C
Field Termination Kit	OFTK05
Fiber Termination B/O Tube Clamp	OFCLMP1
Precision Cleave Tool	OFCLV4
Multimode Cleave Tool	OFCLV3
6 Fiber 900 μm Break Out Tube Kit	OFBOKT6
12 Fiber 900 μm Break Out Tube Kit	OFBOKT12

TYPICAL APPLICATION

- Verify the application is supported for the installed distance.
- Do not exceed maximum loading and minimum bend radius limits.
- Use proper tools for stripping and dressing cable to avoid fiber damage.
- Adhere to good installation practices, avoiding kinks, crushing, and abrasion.
- Code restrictions limit exposed OSP cable entering a building to 15m (50 ft) maximum.
- Adhere to code requirements for direct burial and pathway fill.

INTEGRATED SOLUTIONS



Backbone and Horizontal Cross-Connect Facilities

- **OPTICHANNEL**® Patch Panels, Cords, and Enclosures
- **NEXTFRAME**® and **I-FRAME**® Racks, Enclosures, Cable Management, and Ladder Rack
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