



# **Branch Cable System** (Pre-Fabricated)

### Applications

- Tunnels & Mining High-rise Buildings



### **Quality you can trust**

- Pre-terminated in a controlled factory environment .
- 100% Pre-tested and guaranteed performance before shipment •
- Certified to BS6387 Cat.CWZ
- Can be fitted with IEC60754, 61034 certified parts
- IEC60529 = Waterproof IP68 .







# **Advantages of NND Branch Cable Systems** Quality You Can Trust

With the rising cost in construction, increasing building complexity and tighter project deadlines, there is a growing need for a cost-effective, reliable and efficient solution. With our Branch Cable System, we pre-moulded our unique joint with the main and branch cable together in our factory so that it can be installed with ease and convenience at site.

### **Minimal Installation Time**

Our Branch Cable Systems are prefabricated in the factory and arrive ready for installation. Cables may be fixed to walls with cleats or brackets, eliminating the need for trunking processes and greatly reducing installation overall time.

#### **Cost Effective**

Our Branch Cable Systems help to fit your special customisation needs and save unnecessary overhead costs. Eliminate the need for expensive labour to install Branch Cable Systems. With an easy installation process requiring less manpower, the ready-to-use Branch Cable Systems effectively reduce labour costs.

### Highly Durable & Weather Resistant

Prevent humidity-induced issues during wet weather conditions or humid environments by installing a completely airtight and waterproof Branch Cable System.

### **International Certifications**





Fully customisable using copper, aluminium, armoured, single core and multicore solutions

 Compliant with IEC60754, 61034 and can be made fire and water-resistant compliant to BS6387 CWZ and IEC60529 (IP68).

### **Low Labour Cost**

Our Branch Cable Systems come certified by a third party, so you can be assured that products are safe and of the highest quality. The certification also eliminates the need to engage other parties to test or check the cables.

### **Phase identification**

Both the main cables and branch cables are colour-coded for easy phase discrimination by request.



BACKED BY INTERNATIONAL STANDARD RATING OF IP68

- Can be pre-fitted with fuse-isolated branches to prevent system outages and any risk of fire.
- Can be pre-fitted with BS6387CWZ proprietary fire-resistant plug and play safety connector kits.



## **Project References**

### **Customers Who Trusted Our Solutions**

### Land Transport Authority (LTA) Projects



CIRCLE LINE STAGE 2 CIRCLE LINE STAGE 3 CIRCLE LINE STAGE 4 CIRCLE LINE STAGE 5 CIRCLE LINE EXTENSION DOWNTOWN LINE STAGE 1 DOWNTOWN LINE STAGE 2 DOWNTOWN LINE STAGE 3 THOMSON LINE STAGE 1 THOMSON LINE STAGE 2 THOMSON LINE STAGE 3 THOMSON LINE STAGE 4 THOMSON LINE STAGE 5 CIRCLE LINE 6 & NORTH-EAST LINE EXTENSION

### Singapore Power Grid Projects

EAST-WEST TUNNEL STAGE 1	NORTH-SOUTH TUNNEL STAGE 1
EAST-WEST TUNNEL STAGE 2	NORTH-SOUTH TUNNEL STAGE 2
EAST-WEST TUNNEL STAGE 3	NORTH-SOUTH TUNNEL STAGE 3

### **Building Projects**

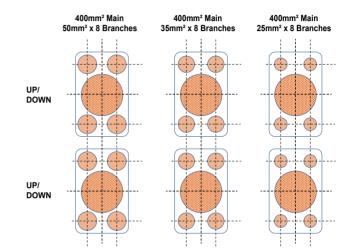
DATA CENTRE PROJECTS MULTI-STOREY WAREHOUSE PROJECTS CONDOMINIUM PROJECTS



# **Branch Joint Specifications** Multi-Branch Single Core Cable Systems

NND has developed a comprehensive range of single and multi-branch systems for supplying power to skyscrapers and other high-rise buildings. Each joint can accommodate from 1 to 8 branches from a single main cable. As with other systems, the joints are IP68-rated fully dust and waterproof and can be manufactured to any specification, including British Standard BS6387 CWZ for fire resistance.

### **Sample Configurations**



Main Cable	Joint Dimensions		Branch Size	Maximum branches		
Size (mm²)	x (mm)	y (mm)	z (mm)	mm²	Branches	Fig
			16	8		
240	140	65	65	25	8	
240	140	05	65 65	35	8	
				50	8	
			65 65	16	8	
300	140	6E		25	8	1
300	140	0 65 65		35	8	
			50	8		
	00 140 65	16	16	8		
400			C.F.	25	8	
400		140 65 65	65	35	8	
				50	7	
				16	8	
500	140	140 65 65   140 65 65	25	8		
500			65	35	7	
				50	5	
	140			16	8	2
630					25	5
630	140		35	5		
				50	3	

Fig 1

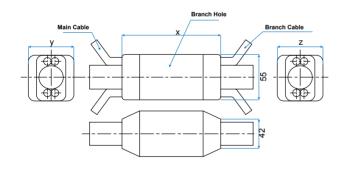
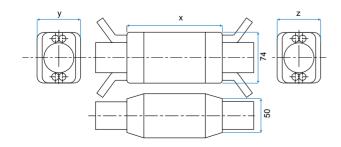
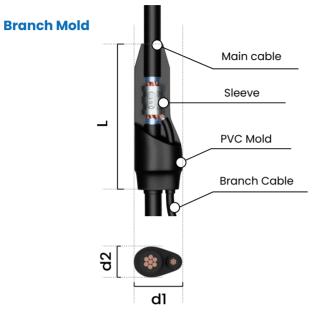


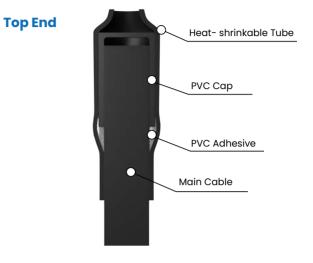
Fig 2





# Branch Joint Specifications Single/ Multi-Core Modular Cable Systems





### **One Branch**

Main Cable	Branch Cable Min - Max	Dimensions (Approx.)		Numbe		Number of Plate
Size (mm²)	Size (mm²)	dl (mm)	d2 (mm)	L (mm)	Thate	
10	6 - 10	40				
16	6 - 16		25	100	N4 00	
25	6 - 25		35	100	M-00	
35	10 - 25					
50	16 - 25	49				
70	16 - 35		41	110	M-01	
95	16 - 50					
120	16 - 95					
150	16 - 95	60	47	130	M-02	
185	16 - 95					
240	16 - 120					
300	16 - 120	72	56	136	M-03	
400	25 - 120					
500	25 - 240	79	52	140	M-04	
630	25 - 240	,,,	02	140	WI OF	
800	25 - 240	94	78	155	M-05	
1000	25 – 240	54	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	100	W 00	

### **Two Branches**

Main Cable	Branch Cable Min - Max	Dimensions (Approx.)			Number of Plate
Size (mm²)	Size (mm²)	dl (mm)	d2 (mm)	L (mm)	
35	10 - 16				
50	10 - 16				
70	10 - 16	60	47	130	M-02
95	10 - 16				
120	10 - 25				

# **Applications** Tunnels & Mining

TRANSPORTATION TUNNELS

PUBLIC WORK TUNNELS MINE TUNNELS



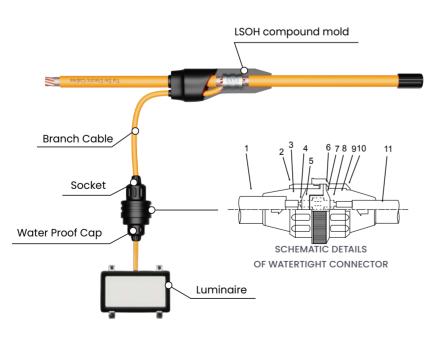
Our IP68-rated, Branch Cable can be used in any kind of tunnel, be it pedestrian, road, high-speed rail or urban/suburban metro. Low-smoke, halogen-free and fire-proof rated to BS6387 CWZ are some of the characteristics of our Branch Cable, making it suitable for emergency lighting runs and any installation environment where safety is of utmost concern, whilst their simplicity can reduce installation times down to 1/5 compared to traditional installation techniques.

We can also supply the systems pre-terminated with fireproof connectors to ensure the safety and integrity of the entire cable run.





### Illumination Cables with Watertight Connectors



- Each luminaire is fuse protected: In case a luminaire is off due to an accident, other luminaires on the same circuit remain on.
- Client/ Contractor is able to find the damaged fitting easily, exchange of a luminaire is easy due to plug & socket type connector.

1	Receptacle-use cable	2PNCT3cx2.0 mm <sup>2</sup>
2	Receptacle-use hexagon cap nut	Flame retardant nylon
3	Receptacle-use mold	Chloroprene rubber mold
4	Receptacle pin (male)	BsB
5	Receptacle mold (push)	Chloroprene rubber mold
6	Washer	Flame retardant mold
7	Plug mold (push)	Chloroprene rubber mold
8	Plug pin (female)	BsB
9	Plug mold	Chloroprene rubber mold
10	Plug-use hexagon cap nut	FVCT3cx2.0 mm <sup>2</sup>
11	Plug-use cable	Flame retardant cable

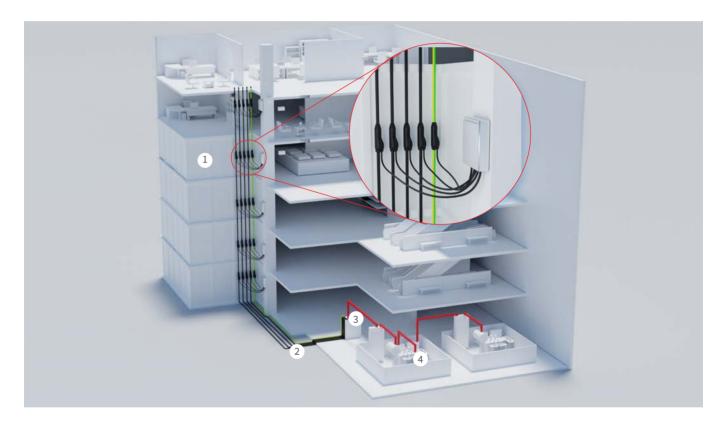
# **Applications** High-Rise Buildings

CT !	RESIDENTIAL
Ň	HEALTHCARE
$\otimes$	COMMERCIAL
	HOSPITALITY
<i>¶</i> ].	MIXED-USE BUILDINGS



We provides a wide range of cable sizes and types to meet the needs of any electrical installation project, be it high-rise multiple-occupancy residential blocks, hospital, commercial, data centres, hotels or mixed use buildings. Our modular pre-fabricated cable systems are available with a wide range of cables including flame-proof cables, armoured cables, anti-termite/anti-rodent or standard PVC cable.

### **System Overview**



#### **OUR POWER TRANSMISSION & DISTRIBUTION SOLUTIONS**



1. BRANCH CABLE SYSTEMS



2. CABLES & WIRES





**3. BUSWAY SYSTEMS** 

4. TRANSFORMERS

### **First Stop for Your Projects**

### **About NND**

NND assembles their modular cable system in a controlled factory environment, greatly reducing installation time and eliminating the risks associated with terminating cables on site. The modular systems that NND produces here at their dedicated facility are assembled and tested to the highest standards by highly skilled local staff.

Since establishment in 2003, NND is proud to have supplied modular cable systems into hundreds of high rise buildings and tunnel projects across Asia and in the Middle East saving thousands of hours in installation time. All of NND systems can be adapted to suit your individual requirements, sales and design teams are always on hand to help.

#### FACTORY PLANT

Nishiden (Malaysia) Sdn. Bhd

Established in May, 2003

BS & IEC Certified Manufacturing

Address: 17 jalan paku 16/6. Section 16, 40200 Shah. Alam, Selangor D.E ,Malaysia

### **About LKH Projects Distribution**

LKH Projects Distribution (LKHPD) is an established electrical solution provider in Southeast Asia since 1990, serving a broad spectrum of customer bases. Drawing upon more than three decades of experience and expertise, LKHPD continues to build on its capabilities and deliver focused solutions to its customers. Our strategic initiative of diversification and expansion enables us to capitalize on opportunities in Singapore and across key markets in Southeast Asia.

Working with world's leading brands, LKHPD brings you a world-class solution with application and technical assistance throughout the installation of your projects on the following services:

- Power Distribution & Transmission

Lighting

EMF Testing Services

Data Communications

#### Catalogue Serial Number: LKHPD\_BCS\_V01-072022

Every possible effort has been made to ensure that the information contained in this publication is correct and current at the time of printing.

LKHPD reserves the right to change the information and/or specifications at any time without notice in light of technical improvement and continued development.

(Updated as at July 2022)



Latest Branch Cable System Solutions https://www.lkhpd.com.sg/solutions/power-solutions/ branch-cables/



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