



**TRI LUX**  
SIMPLIFY YOUR LIGHT.

# NORDIC TRACK

## PLANNING AID



# PLANNING GUIDE NORDIC ALUMINIUM 3-CIRCUIT TRACK



This planning guide is designed to give you a quick and easy overview of the various options in our track portfolio, identify the special features of the individual variants, and generate a compilation of the materials required for your individual 3-circuit track project.

Our extensive 3-circuit track programme enables the implementation of extremely flexible infrastructures for the power supply of durable, long-life lighting systems – while complying with legal regulations and standards.

The technical design of the 3-circuit track (surface-mounted + flanged) makes it possible to divide the lighting installation into three separately switchable groups: e.g. general, accent and decorative lighting.

In addition to the four individual copper conductors for the 3-circuit phases and the neutral conductor, the DALI version has two additional conductors integrated into the track for transmitting the control signal.

The electrical connection between the supply line and the track is made using feeds (XTS 11, XTS12 and XTS14), L-connectors (XTS34, XTS35), T-connectors (XTS36, XTS37, XTS39, XTS40) or X-connectors (XTS38). It is not possible to feed power into the joint connector or flex connector.

**When planning, ensure that the neutral conductor (orange, wide line – see schematic diagrams from page 8) is connected continuously. On the connectors, the screw for mechanical fastening marks the position of the neutral conductor. It is always in the opposite position to the protective conductor.**

3-circuit track can be extended almost indefinitely, taking into account the load distribution to the individual phases and the on-site fuse protection of the load circuits. The maximum load on a single phase is 16 amps. (Caution: observe the inrush currents of the luminaires) The individual track units are electrically connected, for example, using the longitudinal coupling (XTS21) or the familiar L, T or X connectors.

All track can be shortened on site using a hacksaw. All copper conductors must be bent over for fastening and contacting the electrical feeders, couplings and connectors as well as the mechanical connections (straight connector or end cap). (Please order bending tool separately)

The track is approved for use within arm's reach. Nevertheless, the use of plastic covers is recommended for low mounting heights and vertical wall or floor mounting. They offer protection against dust or the ingress of foreign bodies and can also be easily shortened on site.
























































































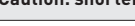





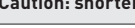











For suspended mounting, use of the butt joint connector (XTS18) is also recommended for mechanical connection and reinforcement of the track.

Recessed track differs from surface-mounted track only by having 'flanges' on its sides. It is attached to an on-site substructure within the ceiling.

For further information, see the Oktalite product data sheet and the mounting instructions from the manufacturer Nordic Aluminium.





















































































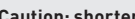














Mounting instructions are included with each delivery. Caution: in the Nordic Aluminium instructions, the illustrations on the following pages are mirrored. The reason for this is the different viewing direction of the observer (Oktalite = ceiling plan from above, Nordic Aluminium = ceiling plan from below).

# BLACK TRACK




































































































AutoCAD symbols	Designation	Quantity			Description	Weight	TOC	TOC DALI
	3 m	1			3P Surface-mounted track 3 m	2.7 kg	5851700	7945000
	3 m EB	1			3P Recessed track 3 m	3.0 kg	5852600	7945900
	2 m	1			3P Surface-mounted track 2 m	1.8 kg	5851600	7944900
	2 m EB	1			3P Recessed track 2 m	2.0 kg	5852500	7945800
	1 m	1			3P Surface-mounted track 1 m	0.9 kg	5851500	7944800
	1 m EB	1			3P Recessed track 1 m	1.0 kg	7942400	7945700
		1			3P Bending tool XTSV12	0.1 kg	5859300	5859300
	Cover can be cut to suit	1			3P Cover/contact guard 2m XTS P11	0.3 kg	9642800	
	XTS 11	1			3P End feed XTS 11	0.2 kg	5855900	7946500
	XTS 12	1			3P End feed XTS 12	0.2 kg	5856000	7946200
	XTS 14	1			3P Centre feed XTS 14	0.2 kg	7942500	7946800
		1			3P Cover for feeds / recessed	0.1 kg	7944100	
	GA 70	1			3P Spot outlet GA70	0.3 kg	5858600	
		1			3P Installation box for spot outlet	0.2 kg	5858700	
	XTS 21	1			3P Straight connector XTS 21	0.1 kg	7942600	7947100
	SKB 18	1			3P Butt joint connector SKB18	0.2 kg	5853500	
	XTS 24	1			3P Joint connector XTS 24	0.2 kg	5856100	
	XTS 34	1			3P L-connector XTS 34	0.2 kg	5856500	7947700
	XTS 35	1			3P L-connector XTS 35	0.2 kg	5856400	7947400
	XTS 36	1			3P T-connector XTS 36	0.2 kg	5856600	7948900
	XTS 37	1			3P T-connector XTS 37	0.2 kg	5856700	7948000
	XTS 38	1			3P X-connector XTS 38	0.3 kg	7942800	7949200
	XTS 39	1			3P T-connector XTS 39	0.2 kg	5856900	7948600
	XTS 40	1			3P T-connector XTS 40	0.2 kg	5857000	7948300
		1			3P Cover for connector / recessed	0.1 kg	9656000	7949800
	XTS 41	1			3P End cap XTS 41	0.1 kg	5856800	
	SKB12	1			3P Ceiling mounting bracket SKB 12	0.1 kg	5853600	
	01/05	1			3P Caddy clip, white/black	0.1 kg	8119000	
Caution: shorter distances between the fixing points must be observed according to the ceiling load-bearing capacity.								
	05/05	1			3P Caddy clip, black/black	0.1 kg	8119000	
Caution: shorter distances between the fixing points must be observed according to the ceiling load-bearing capacity.								
	1.5 m	1			3P height-adjustable wire set 1.5 m	0.1 kg	7943000	
	3 m	1			3P height-adjustable wire set 3.0 m	0.1 kg	7943100	
	6 m	1			3P height-adjustable wire set 6.0 m	0.1 kg	7943200	
	Sleeve	1			3P Ceiling fixing for wire	0.1 kg	5973900	
	Stabiliser	1			3P Track stabiliser	0.1 kg	5974000	
	Socket outlet	1			3P Socket outlet for track	0.2 kg	5858300	
Maximum distance between fixing points = 1.5 m   Maximum total weight between two fixing points = 20 kg								



# SILVER TRACK

AutoCAD symbols	Designation	Quantity				Description	Weight	TOC	TOC DALI
	3 m	1			3P	Surface-mounted track 3 m	2,7 kg	5852000	7944700
	3 m EB	1			3P	Recessed track 3 m	3,0 kg	5852900	7945600
	2 m	1			3P	Surface-mounted track 2 m	1,8 kg	5851900	7944600
	2 m EB	1			3P	Recessed track 2 m	2,0 kg	5852800	7945500
	1 m	1			3P	Surface-mounted track 1 m	0,9 kg	5851800	7944500
	1 m EB	1			3P	Recessed track 1 m	1,0 kg	7942300	7945400
		1			3P	Bending tool XTSV12	0,1 kg	5859300	
	XTS 11	1			3P	End feed XTS 11	0,2 kg	5857100	7946400
	XTS 12	1			3P	End feed XTS 12	0,2 kg	5857200	7946100
	XTS 14	1			3P	Centre feed XTS 14	0,2 kg	5974300	7947000
		1			3P	Cover for feeds / recessed	0,1 kg	7944000	
	GA 70	1			3P	Spot outlet GA70	0,3 kg	5858800	
		1			3P	Installation box for spot outlet	0,2 kg	7943400	
	XTS 21	1			3P	Straight connector XTS 21	0,1 kg	5973600	7947000
	SKB 18	1			3P	Butt joint connector SKB18	0,2 kg	5854200	
	XTS 24	1			3P	Joint connector XTS 24	0,2 kg	5857300	
	XTS 34	1			3P	L-connector XTS 34	0,2 kg	5857600	7947600
	XTS 35	1			3P	L-connector XTS 35	0,2 kg	5857500	7947300
	XTS 36	1			3P	T-connector XTS 36	0,2 kg	5857700	7948800
	XTS 37	1			3P	T-connector XTS 37	0,2 kg	5857800	7947900
	XTS 38	1			3P	X-connector XTS 38	0,3 kg	5857400	7949100
	XTS 39	1			3P	T-connector XTS 39	0,2 kg	5858000	7948500
	XTS 40	1			3P	T-connector XTS 40	0,2 kg	5858100	7948200
	XTS 41	1			3P	End cap XTS 41	0,1 kg	5857900	
	SKB12	1			3P	Ceiling mounting bracket SKB 12	0,1 kg	5854300	
	01/05	1			3P	Caddy clip, white/silver	0,1 kg	8119500	
Caution: shorter distances between the fixing points must be observed according to the ceiling load-bearing capacity.									
	05/05	1			3P	Caddy clip, silver/silver	0.0 kg	8119500	
Caution: shorter distances between the fixing points must be observed according to the ceiling load-bearing capacity.									
	1.5 m	1			3P	height-adjustable wire set 1.5 m	0,1 kg	7943000	
	3 m	1			3P	height-adjustable wire set 3.0 m	0,1 kg	7943100	
	6 m	1			3P	height-adjustable wire set 6.0 m	0,1 kg	7943200	
	Sleeve	1			3P	Ceiling fixing for wire	0,1 kg	5859300	
	Stabiliser	1			3P	Track stabilisor	0,2 kg	5974000	
	Socket outlet	1			3P	Socket outlet for track	0,2 kg	5858300	
Maximum distance between fixing points = 1.5 m   Maximum total weight between two fixing points = 20 kg									

# WHITE TRACK

AutoCAD symbols	Designation	Quantity				Description	Weight	TOC	TOC DALI
	3 m	49			3P	Surface-mounted track 3 m	2,7 kg	5851400	7944400
	3 m EB	1			3P	Recessed track 3 m	3,0 kg	5852400	7945300
	2 m	31			3P	Surface-mounted track 2 m	1,8 kg	5851300	7944300
	2 m EB	1			3P	Recessed track 2 m	2,0 kg	5852300	7945200
	1 m	1			3P	Surface-mounted track 1 m	0,9 kg	5851200	7944200
	1 m EB	1			3P	Recessed track 1 m	1,0 kg	7942200	7945100
		1			3P	Bending tool XTSV12	0,1 kg	5859300	
	Cover can be cut to suit	1			3P	Cover/contact guard 3m XTS P11	0,3 kg	9642700	
	XTS 11	1			3P	End feed XTS 11	0,2 kg	5854700	7946300
	XTS 12	1			3P	End feed XTS 12	0,2 kg	5854800	7946000
	XTS 14	1			3P	Centre feed XTS 14	0,2 kg	5974200	7946600
		1			3P	Cover for feeds / recessed	0,1 kg	7943900	7943900
	GA 70	1			3P	Spot outlet GA70	0,3 kg	5858400	
		1			3P	Installation box for spot outlet	0,2 kg	7943300	
	XTS 21	5			3P	Straight connector XTS 21	0,1 kg	5973500	7946900
	SKB 18	1			3P	Butt joint connector SKB18	0,2 kg	5853000	
	XTS 24	1			3P	Joint connector XTS 24	0,2 kg	5854900	
	XTS 34	22			3P	L-connector XTS 34	0,2 kg	5855300	7947500
	XTS 35	22			3P	L-connector XTS 35	0,2 kg	5855200	7947200
	XTS 36	6			3P	T-connector XTS 36	0,2 kg	7942700	7948700
	XTS 37	6			3P	T-connector XTS 37	0,2 kg	5855500	7947800
	XTS 38	6			3P	X-connector XTS 38	0,3 kg	5855100	7949000
	XTS 39	6			3P	T-connector XTS 39	0,2 kg	5855700	7948400
		1			3P	Cover for connector / recessed	0,1 kg	9656100	7949600
	XTS 41	1			3P	End cap XTS 41	0,1 kg	5855600	
	SKB12	1			3P	Ceiling mounting bracket SKB 12	0,1 kg	5853100	
	01/01	1			3P	Caddy clip, white/white	0,1 kg	8119100	
Caution: shorter distances between the fixing points must be observed according to the ceiling load-bearing capacity.									
	1.5 m	1			3P	height-adjustable wire set 1.5 m	0,1 kg	7943000	
	3 m	1			3P	height-adjustable wire set 3.0 m	0,1 kg	7943100	
	6 m	1			3P	height-adjustable wire set 6.0 m	0,1 kg	7943200	
	Sleeve	1			3P	Ceiling fixing for wire	0,1 kg	5973900	
	Stabiliser	1			3P	Track stabiliser	0,2 kg	5974000	
	Socket outlet	1			3P	Socket outlet for track	0,2 kg	5858300	
Maximum distance between fixing points = 1.5 m   Maximum total weight between two fixing points = 20 kg									



# PLANNING NOTES

## Product colours of the track are colour-coded:

Housing colour white 01

Housing colour silver 03/D0

Housing colour black 05

The formulae for calculating the fixing points help planners to determine the correct number of wires, ceiling clips or caddy clips (for OWA ceilings). The information texts highlighted in grey can be included in the planning / calculation as information for the electrical contractor.

## 1x butt joint connector to be planned for each XTS21

### Formula for number of fixing points:

Number of running metres of track / 1.5

+ number of end caps

+ number of corners

+ number of T-connectors x2

+ number of X-connectors x3

**= total fixing points required**

The track must be equipped with a fixing point every 1.5 metres! The load on the rail between two fixing points must be balanced and must not exceed a total load of 20 kg.

### Formula for number of caddy clips:

Number of running metres of track / 1.2

+ number of end caps

+ number of corners

+ number of T-connectors x2

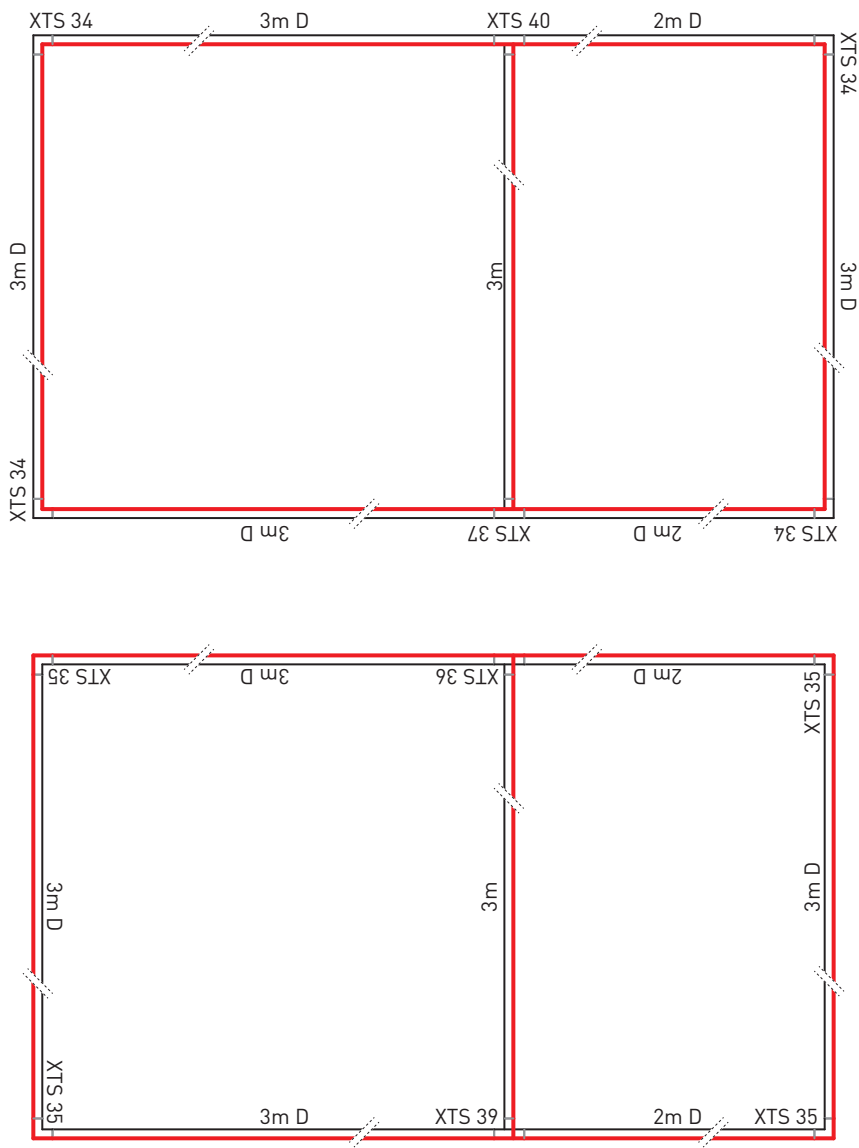
+ number of X-connectors x3

**= total fixing points required**

When **spacing the caddy clips**, the maximum load-bearing capacity of the grid ceiling must be observed. As a rule, the maximum spacing is 1.25 m/1.20 m – this corresponds to every second intersection point with the supporting profile of the grid ceiling.

# GRID ARRANGEMENTS:

In simple grid arrangements with a rectangular outer shape, two T-connectors are always opposite each other, forming a pair. The X-connector that may be required is turned accordingly (see below).



With XTS 34 corners, XTS37 and XTS40 are opposite each other, and with XTS35 corners XTS36 and XTS39 are opposite each other. Even with more complex shapes, these two combinations are often sufficient.



# FURTHER EXAMPLES

