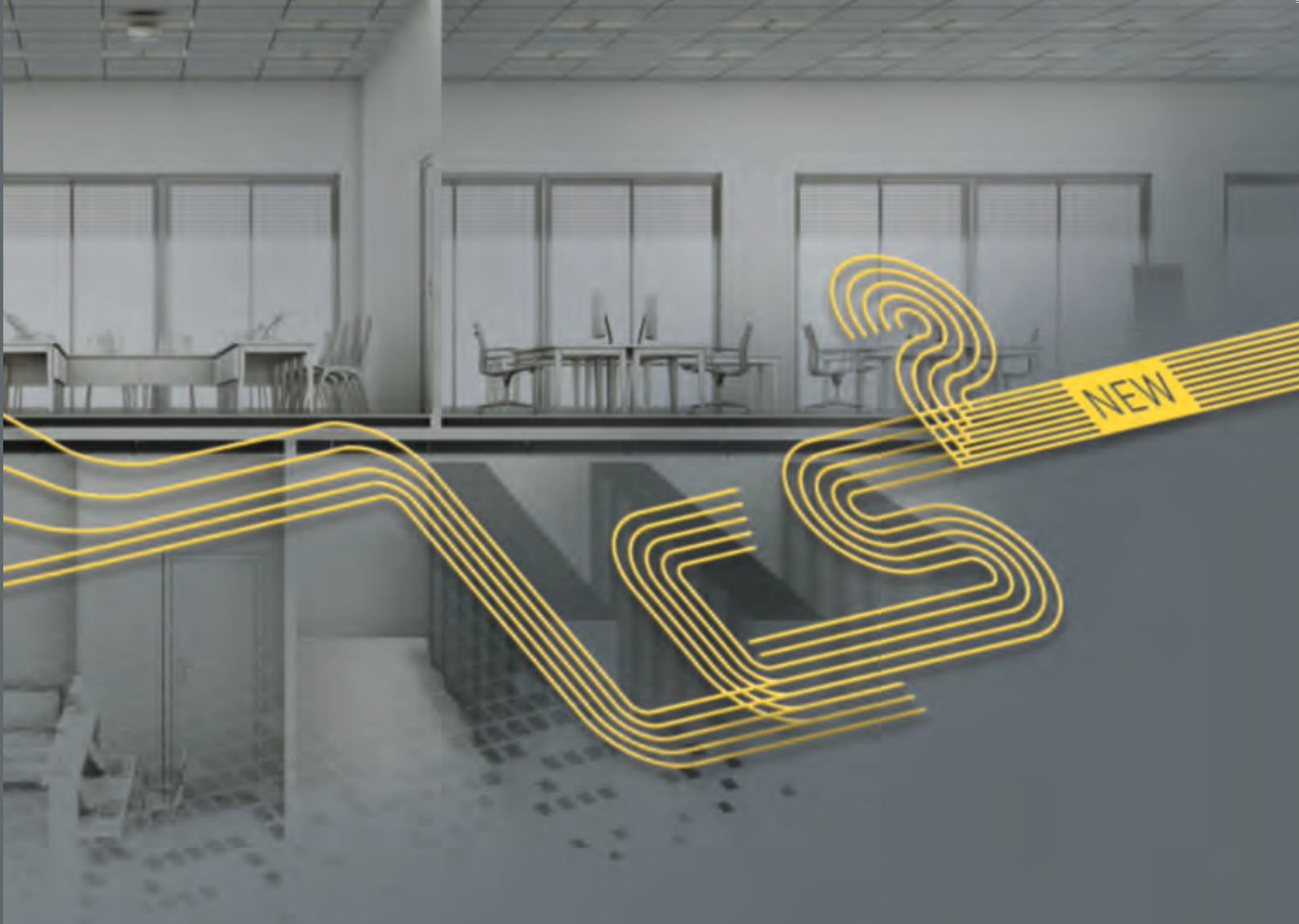




LEGRAND CABLING SYSTEM²

PERFORMANCE

FROM TECHNICAL ROOM
TO WORKSTATION

 **legrand[®]**

LEGRAND CABLING SYSTEM²



Solutions from technical room to workstation

See pages 02 to 13



LCS² copper

See pages 15 to 21



LCS² fibre optic

See pages 22 to 27



LCS² enclosures

See pages 28 to 39



LCS² workstation

See pages 40 to 49

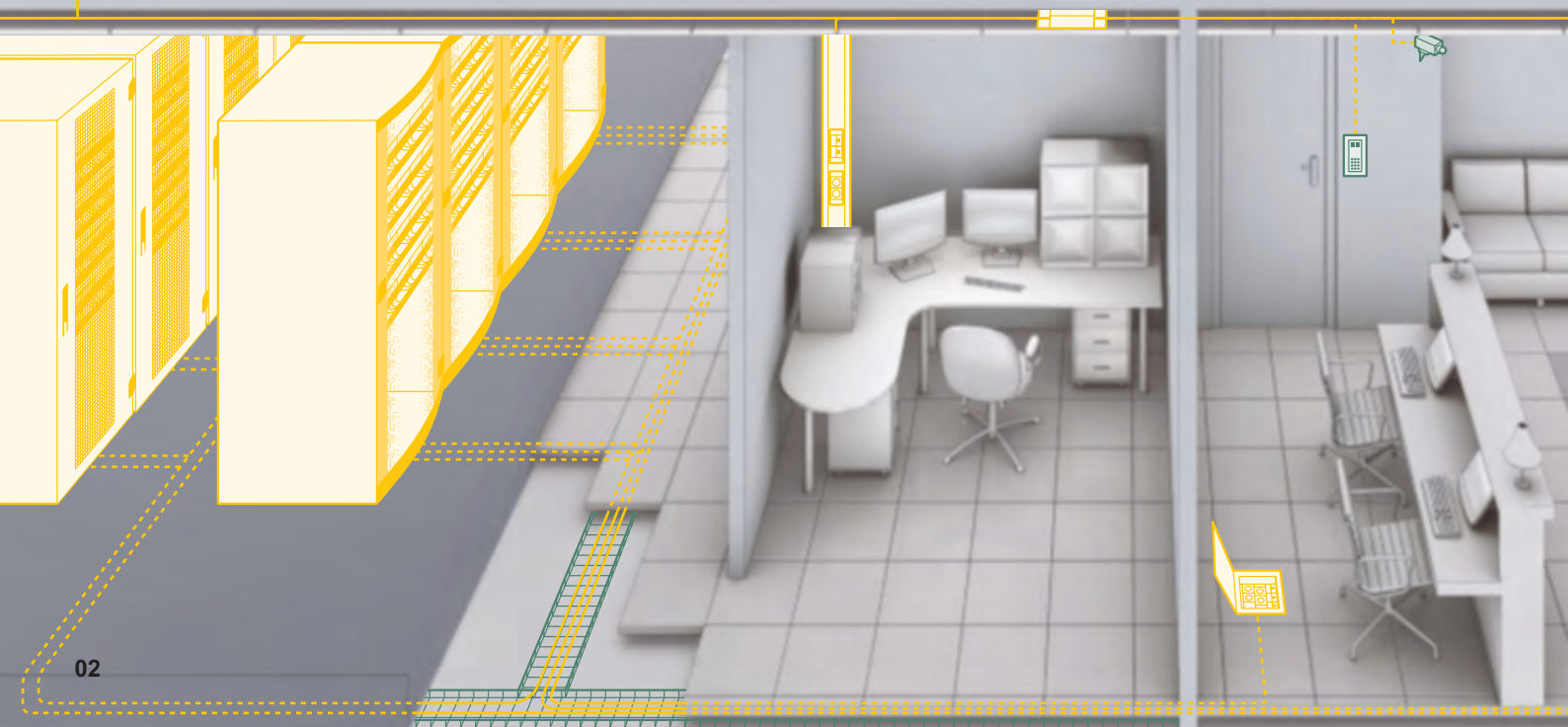


LCS² services

See pages 50 to 53

Catalogue references

See pages 54 to 109



■ LCS² Cabling system products

Complete systems with a 20-year guarantee.
The new LCS² cat. 6A (up to 500 MHz),
cat. 6 (up to 250 MHz) and cat. 5e (up to 100 MHz)
systems have been designed as coherent entities
to optimise their performance.
The systems are suitable for optical fibre cables as
well as copper cables.

See pages 14 to 39

■ Legrand Synergies

The new LCS² systems integrate perfectly in the various other Legrand solutions: DLP trunking system, cabling accessories, cable management, etc.

See pages 42 to 53

Towards network convergence.
The IP convergence products (IP telephony,
IP remote monitoring, IP access control)
can also be a part of the LCS² systems.



LCS²
APPLICATION
EXAMPLE

OFFICE



Area distribution box



RJ 45 socket



Access control



Patch panel





LCS²
APPLICATION
EXAMPLE
**MALL
CENTER**



Switch Mosaic



Cablofil wire mesh



Cabling unit



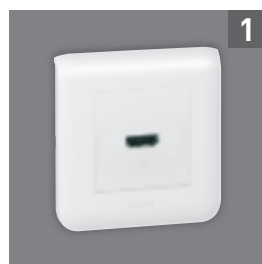
Fibre optic socket





LCS²
APPLICATION
EXAMPLE

CAMPUS



AVS socket



DLP trunking system



Wi-Fi access point



RJ 45 with controlled access







Patch cord



19" wall-mounting cabinet



System guaranteed performance of the Legrand systems

Measurements of LCS² components and links, validated by independent laboratories 3 P Third Party Testing and ETL, have highlighted its triple performance.

Performance of the transmission in cat. 6A, performance of the installation, performance of the maintenance.



1 Performance of the transmission in cat. 6A

For long distance, 10 Giga guarantees only slight signal loss for 100 m. For short distance, 10 Giga guarantees a good echo resistance for 15 m.

2 Performance of the installation

The values measured widely exceed the requirements of the ISO 11801 standard, Edition 2, amendment 2, thus providing a safety margin to conform to the most rigorous constraints of the installation.

3 Performance of maintenance

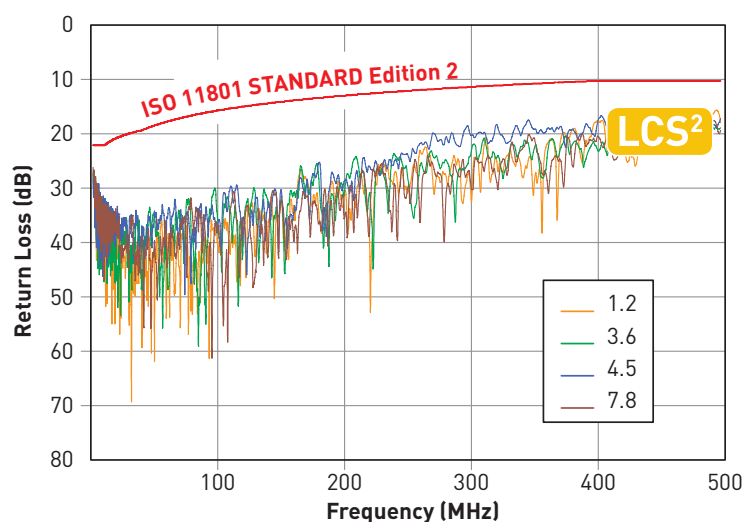
Being committed to deliver a durable LCS² system, Legrand gives a 20-year guarantee on its performance.



Note: all LCS² products are RoHS compliant.

Category 6A	Network protocol supported	COMPONENT MEASUREMENT		LINK MEASUREMENT (CHANNEL)	
		STP		Class EA / cat. 6A	
		500 MHz	250 MHz	500 MHz	250 MHz
		10 Giga	1 Giga	10 Giga	1 Giga
 Attenuation (dB) Loss of signal	LCS ²	0.13	0.06	35.4	24.1
	ISO 11801 Standard, Edition 2, Amendment 2 ⁽²⁾	0.45 max.	0.32 max.	42.1 max.	28.9 max.
	TIA/EIA-568-C.2	0.45 max.	0.32 max.	49.3 max.	33.9 max.
 Return Loss (dB) Echo resistance	LCS ²	17.05	26.59	16.4	22.1
	ISO 11801 Standard, Edition 2, Amendment 2 ⁽²⁾	14 min.	20 min.	8 min.	10 min.
	TIA/EIA-568-C.2	14 min.	20 min.	6 min.	8 min.
 Next (dB) Resistance to interference between pairs⁽¹⁾	LCS ²	37.46	56.93	38.1	54
	ISO 11801 Standard, Edition 2, Amendment 2 ⁽²⁾	37 min.	46 min.	29.2 min.	35.3 min.
	TIA/EIA-568-C.2	34 min.	46 min.	26.1 min.	33.1 min.
 ACR-N (dB) (Alien Crosstalk Ratio) Actual power supplied	LCS ²	37.33	56.87	2.7	29.9

[1] Measurements taken on the 3-6 and 4-5 pairs [2] Values taken from the draft of the ISO 11801 standard Edition 2 amendment 2

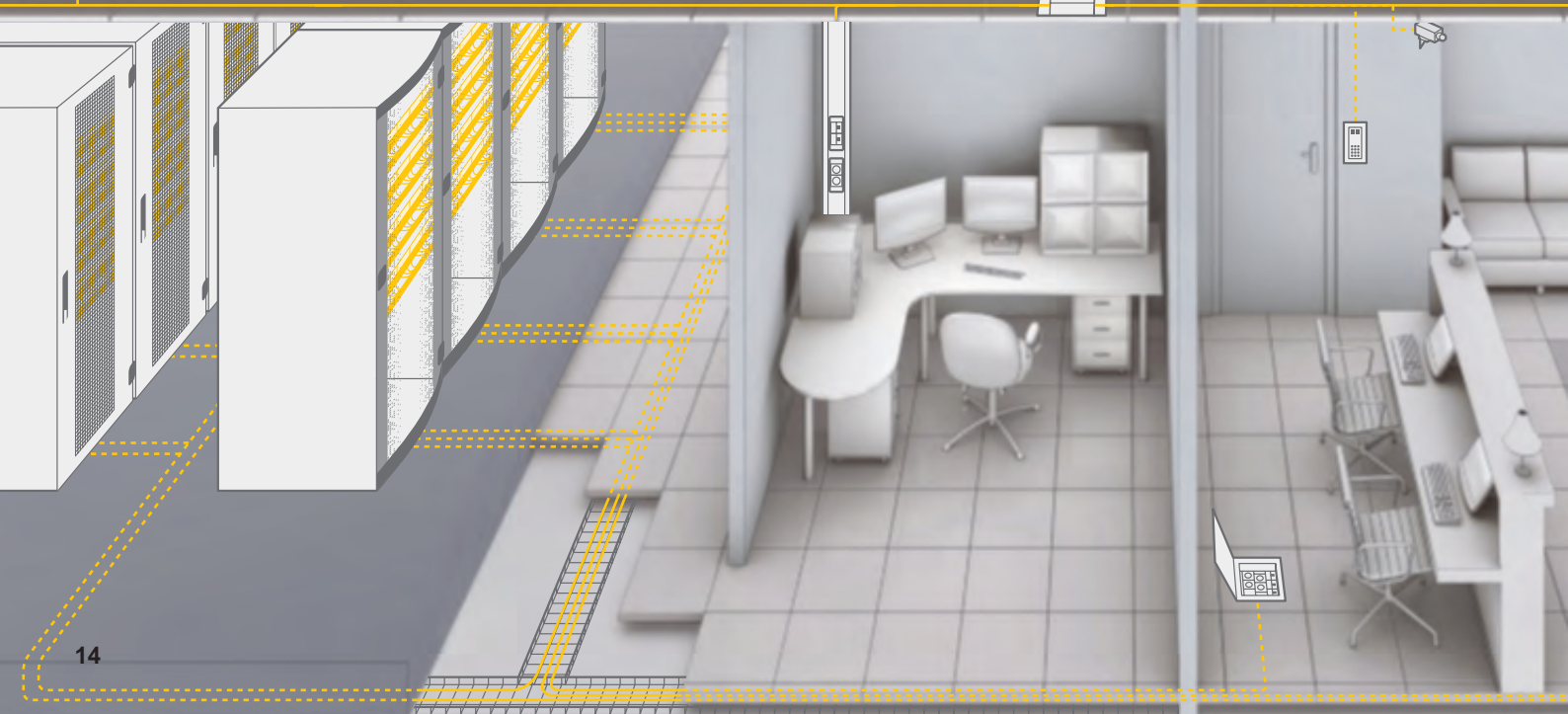
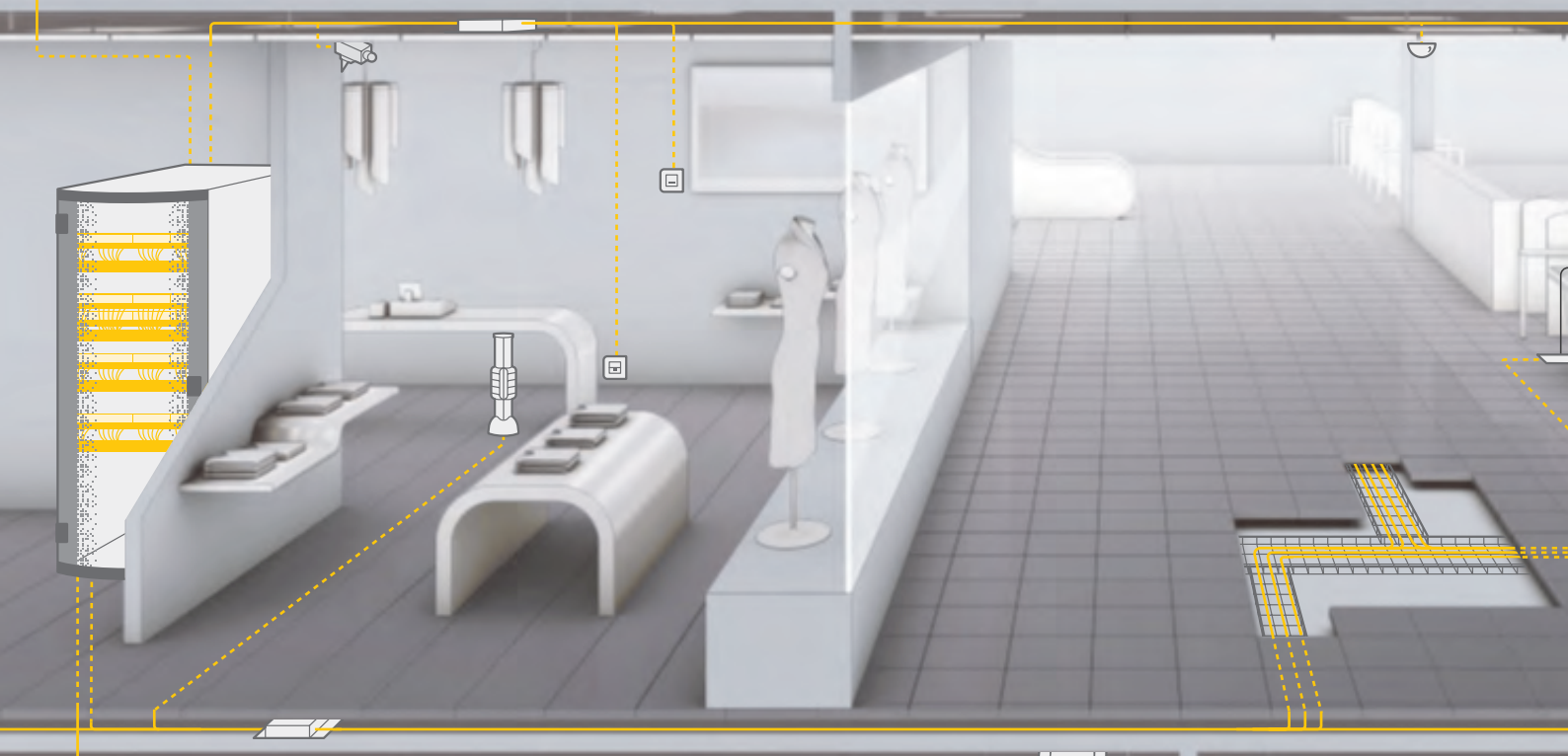


Measurement of the Return Loss on a class E_A link

On each pair, the performances of LCS² are significantly higher than the values required by the ISO 11801 Standard, Edition 2, amendment 2.

Category 6		Network protocol supported	COMPONENT MEASUREMENT			LINK MEASUREMENT (CHANNEL)
			STP	FTP	UTP	Class E / cat. 6
			250 MHz	250 MHz	250 MHz	250 MHz
			1 Giga	1 Giga	1 Giga	1 Giga
	Attenuation (dB)	LCS ²	0.09	0.09	0.09	25.7
	Loss of signal	ISO 11801 Standard, Edition 2, Amendment 2 ⁽²⁾	0.32 max.	0.32 max.	0.32 max.	30.7 max.
	TIA/EIA-568-C.2	0.32 max.	0.32 max.	0.32 max.	35.9 max.	
	Return Loss (dB)	LCS ²	29.8	29.8	29.8	38.8
	Echo resistance	ISO 11801 Standard, Edition 2, Amendment 2 ⁽²⁾	16 min.	16 min.	16 min.	10 min.
	TIA/EIA-568-C.2	16 min.	16 min.	16 min.	8 min.	
	Next (dB) Resistance to interference between pairs ⁽¹⁾	LCS ²	51.3	51.3	51.3	53.9
		ISO 11801 Standard, Edition 2, Amendment 2 ⁽²⁾	46 min.	46 min.	46 min.	35.3 min.
	TIA/EIA-568-C.2	46 min.	46 min.	46 min.	33.1 min.	
	ACR-N (dB) (Alien Crosstalk Ratio) Actual power supplied	LCS ²	51.21	51.21	51.21	28.2

(1) Measurements taken on the 3-6 and 4-5 pairs (2) Values taken from the draft of the ISO 11801 standard Edition 2 amendment 2





LCS² COPPER

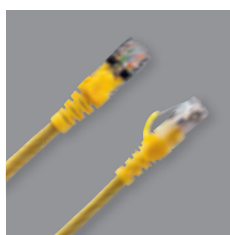
A complete system up to 10 Gbits/s



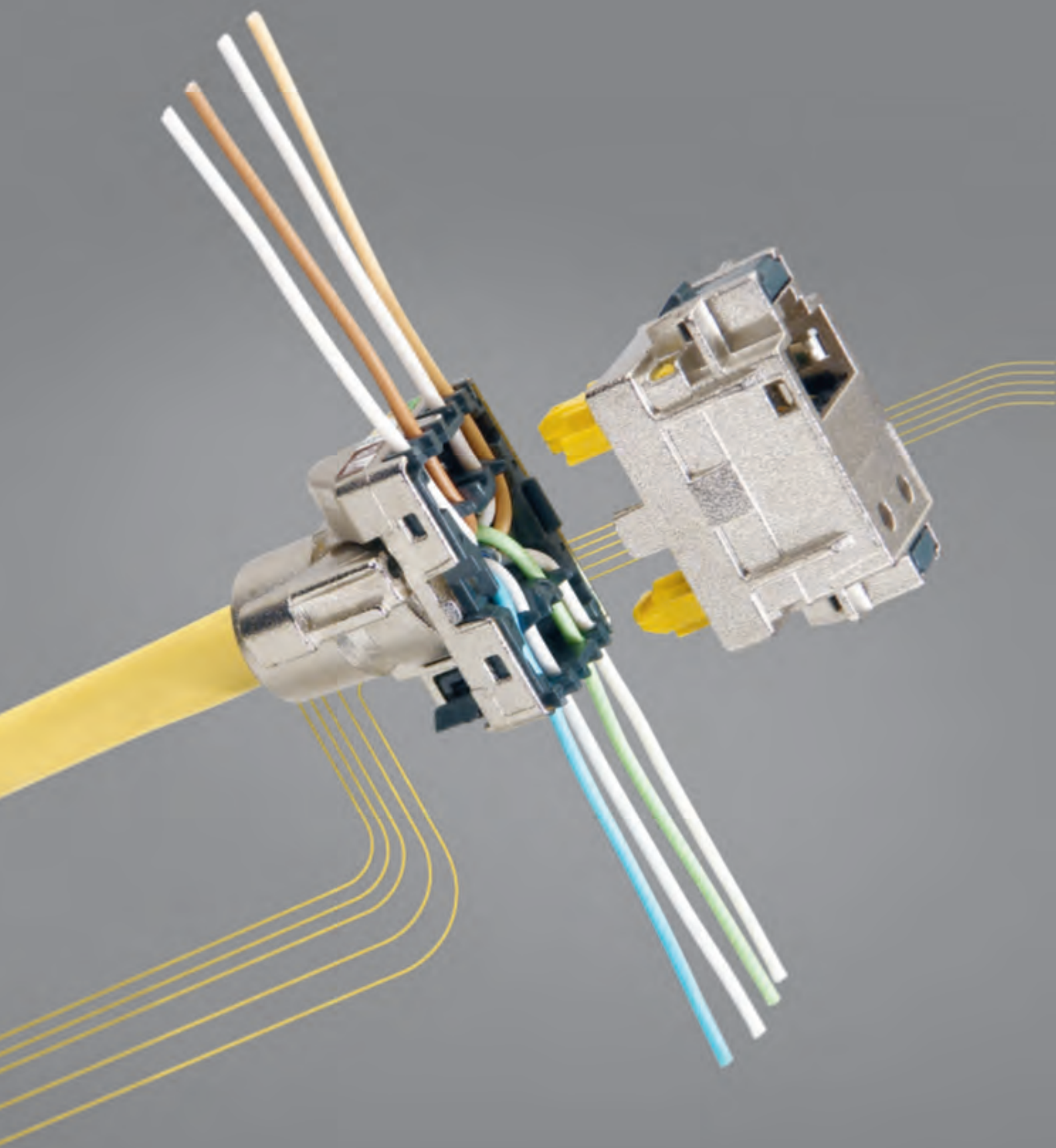
Connectors
See pages 16 to 17



Patch panels
See pages 18 to 19



Patch cords and cables
See pages 20 to 21

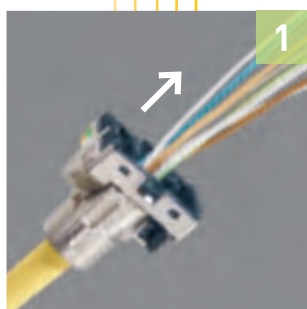


New LCS² connector

Performance of the installation

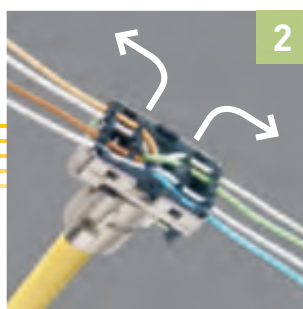
RJ 45 connector is the core element contributing to the performance of the LCS² system.

You can obtain a perfect connection within a few seconds guaranteeing an optimum performance of the link from the patch panel to the RJ 45 socket (see page 46).



Insert the cable in the rear part

Visibility of the marking as per the TIA/EIA code. Takes all cables currently available on the market: U/UTP, F/UTP and SF/UTP.



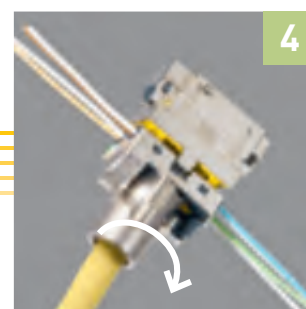
Separate and insert the strands

Intuitively maintain 13 mm, no need to measure.



Add the upper part of the connector

The tamperproof insert gives ease of movement.



Turn to guarantee the connection

Simply turn to flatten the strands simultaneously. Cut them, and the connector is ready!



LCS² Patch panels

Performance of maintenance

The design of the new LCS² patch panels optimises the mounting and maintenance.

Maintaining the cables with cable guides, blocks of 6 RJ 45 connectors, clipping and unclipping each connector from the front panel.



Better fixing by clamp

Cable maintained in its cable guide.



Room for maintenance

Simple unclipping of LCS² connectors.



Panels provided with quick-fixing system

Universal mounting any rack or cabinets.

The new LCS² panels can also be fitted with:



Telephone block



FC type video broadcast block



LC fibre optic cassette

Legrand cables and cords

coherence and performance

To ensure total coherence of its LCS² cat. 6A, cat. 6 and cat. 5e systems,

Legrand offers a range of 4 twisted pair cables
in the four types: U/UTP, F/UTP, S/FTP, SF/UTP.

■ High-quality manufacturing

Manufactured to high quality standards,
with thicker insulation to reduce the effects
of crosstalk, and reduction of the twist pitch of the pairs:
the quality of Legrand cables is suitable for the LCS²
category 6A, category 6 and category 5e systems,
ensuring high performance from the patch panel right
through to the RJ 45 socket. What's more, Legrand offers
its cables in 2 versions with sheaths suitable for different
environments: LSZH and PVC. The 3P laboratory
has certified all the Legrand cables to be compliant
with the ISO IS 11 801, EN 50173-1 standards
and TIA/EIA-568-C.2.

[See catalogue pages](#)



Legrand cat. 6A F/UTP cable.

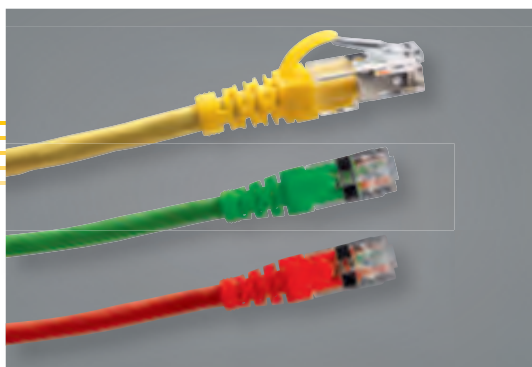


Legrand cat. 6 F/UTP cable.



Legrand cat. 6 SF/UTP cable.

	SHEATH	MARKING	STORAGE/TRANSPORT TEMPERATURE	OPERATING TEMPERATURE
CAT. 7 S/FTP CABLE 100 OHMS	LSZH in accordance with NFC 32062 with flame retardant effect in accordance with IEC 60332-1 & NFC 32070 2.1 Ø 7.5 mm - Colour yellow RAL 1018	LEGRAND 32777 4 pair 23 AWG S/FTP 100 ohms LSZH CAT. 7 900 MHz - VERIFIED TO ISO 11801 IEC 60332-1 EN 50173 - TIA/EIA 568C - VPN/NVP% Batch no. + length in metres	0 to +50 °C	-20 to +60 °C
CAT. 6A F/UTP CABLE 100 OHMS	LSZH in accordance with NFC 32062 with flame retardant effect in accordance with IEC 60332-1 & NFC 32070 2.1 Ø 7.8 mm - Colour yellow RAL 1018	LEGRAND 32778 4 pair 24 AWG F/UTP 100 ohms LSZH CAT. 6A 500 MHz - VERIFIED TO ISO 11801 IEC 60332-1 EN 50173 - TIA/EIA 568C - VPN/NVP% Batch no. + length in metres	0 to +50 °C	-20 to +60 °C
CAT. 6 U/UTP CABLE 100 OHMS	PVC or LSZH in accordance with NFC 32062 with flame retardant effect in accordance with IEC 60332-1 & NFC 32070 2.1 Ø 6.4 mm - Colour blue RAL 5015	LEGRAND (4 pair or 2x4 pair) 24 AWG UTP 100 ohms 250 Mhz (PVC or LSZH) CAT. 6 250 MHz - EC VERIFIED TO ISO 11801 IEC 60332-1 EN 50173-1 TIA/EIA 568A Batch no. + length in metres	0 to +50 °C	-20 to +60 °C
CAT. 6 F/UTP CABLE 100 OHMS	PVC or LSZH in accordance with NFC 32062 with flame retardant effect in accordance with IEC 60332-1 & NFC 32070 2.1 Synthetic water repellent tape Ø 7 mm - Colour blue RAL 5015	LEGRAND (4 pair or 2x4 pair) 24 AWG FTP 100 ohms 250 Mhz (PVC or LSZH) CAT. 6 250 MHz - EC VERIFIED TO ISO 11801 IEC 60332-1 EN 50173-1 TIA/EIA 568A Batch no. + length in metres	0 to +50 °C	-20 to +60 °C
CAT. 6 SF/UTP CABLE 100 OHMS	PVC or LSZH in accordance with NFC 32062 with flame retardant effect in accordance with IEC 60332-1 & NFC 32070 2.1 Synthetic water repellent tape Ø 7.7 mm - Colour blue RAL 5015	LEGRAND 4 pair 24 AWG SFTP 100 ohms 250 Mhz (PVC or LSZH) CAT. 6 250 MHz - EC VERIFIED TO ISO 11801 IEC 60332-1 EN 50173-1 TIA/EIA 568A Batch no. + length in metres	0 to +50 °C	-20 to +60 °C
CAT. 5e U/UTP CABLE 100 OHMS	PVC or LSZH in accordance with NFC 32062 with flame retardant effect in accordance with IEC 60332-1 & NFC 32070 2.1 Ø 5.2 mm - Colour light grey RAL 7035	LEGRAND CAT.NO (4 pair or 2x4 pair) 24 AWG UTP 100 ohms (PVC or LSZH) CAT. 5e EC VERIFIED TO ISO 11801 IEC 60332-1 EN 50173-1 TIA/EIA 568A Batch no. + length in metres	-15 to +70 °C	+5 to +40 °C
CAT. 5e F/UTP CABLE 100 OHMS	PVC or LSZH in accordance with NFC 32062 with flame retardant effect in accordance with IEC 60332-1 & NFC 32070 2.1 Ø 5.5 mm - Colour light grey RAL 7035	LEGRAND CAT.NO (4 pair or 2x4 pair) CAT. 5e EC VERIFIED TO ISO 11801 IEC 60332-1 EN 50173-1 TIA/EIA 568A Batch no. + length in metres	-15 to +70 °C	+5 to +40 °C



Ensure high-quality continuity: perfect plug connection and transmission performance... Available in several colours.

■ Individually tested cords

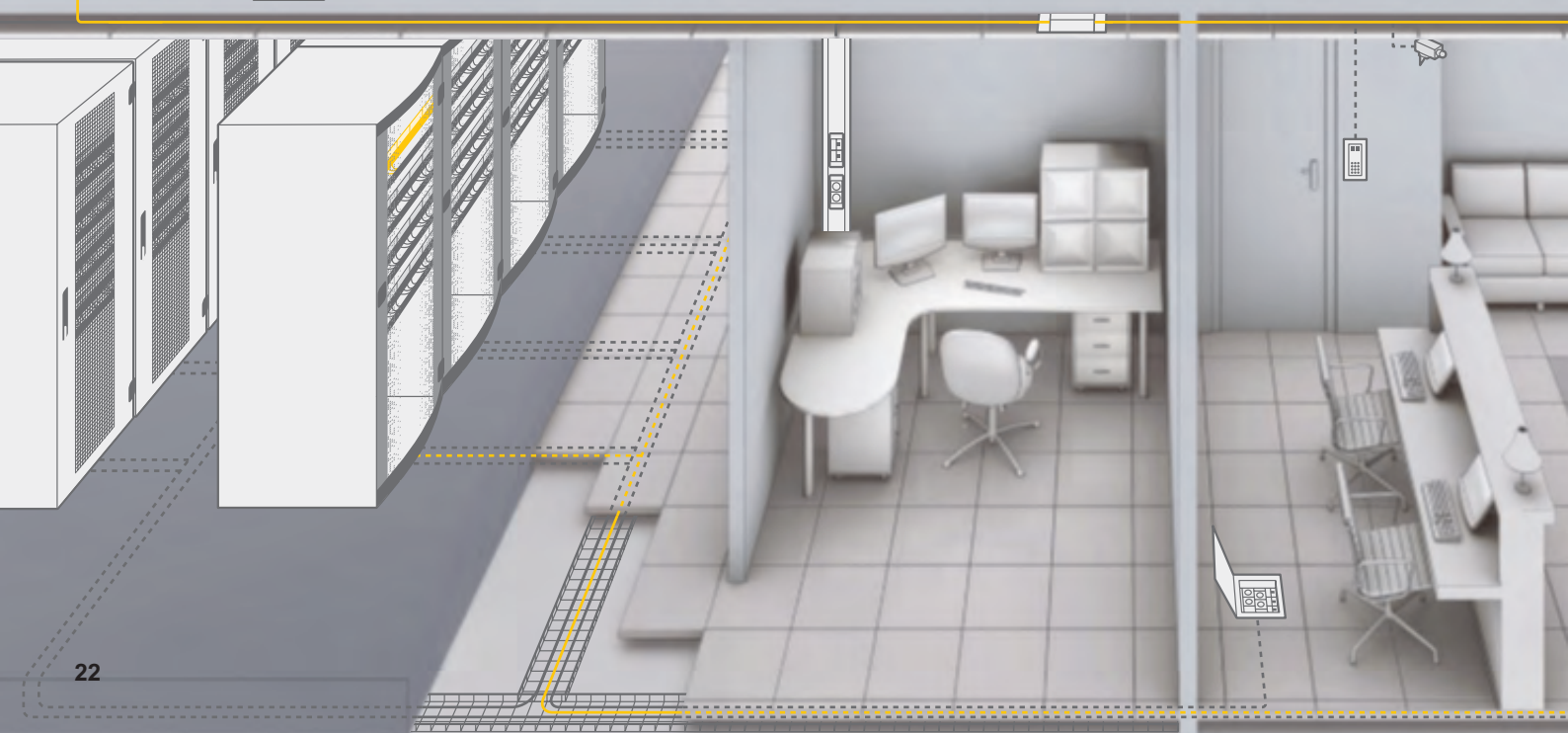
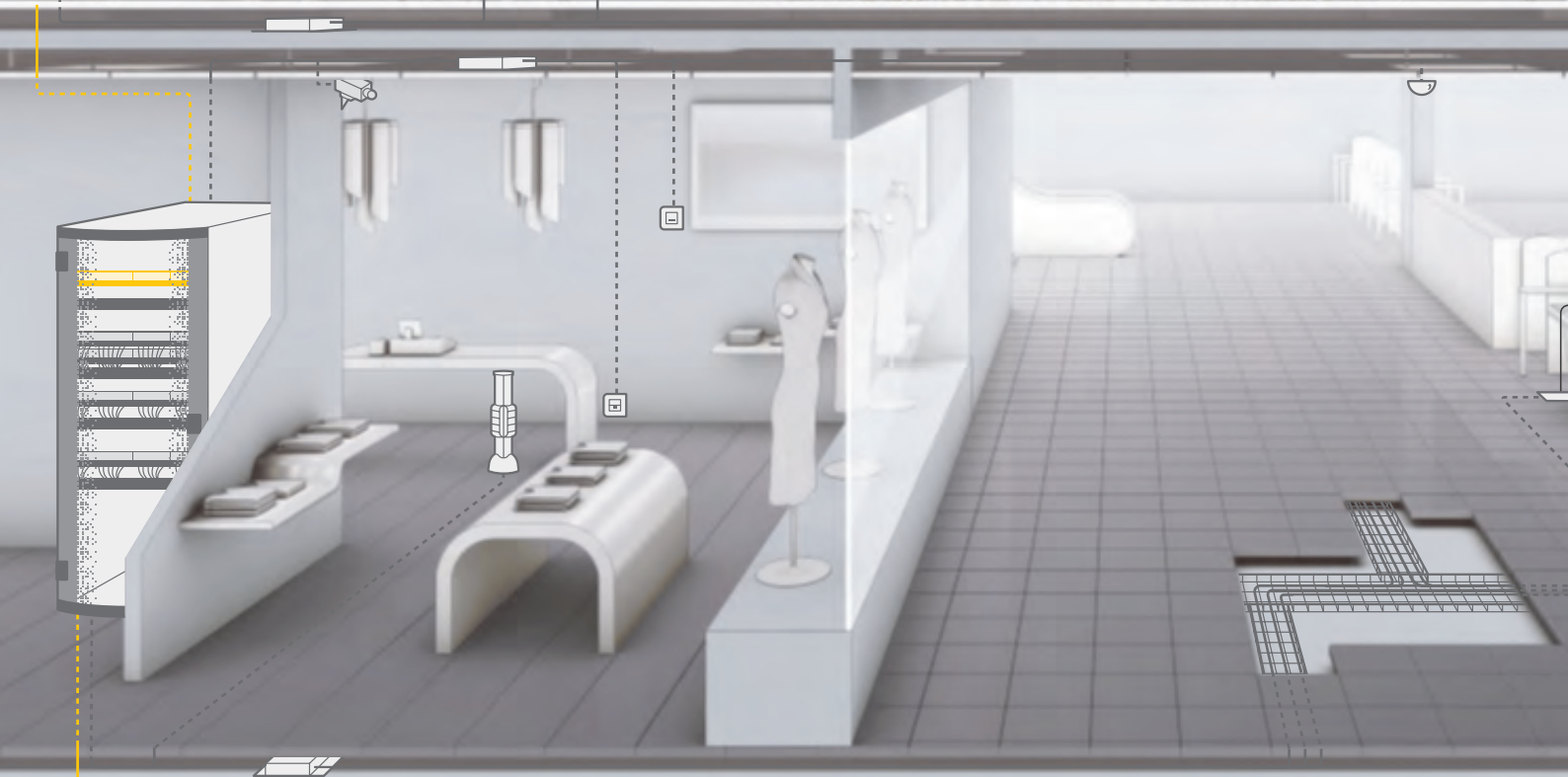
Legrand patch cords ensure high-quality continuity in a cabling system like other components. Legrand therefore takes the same care with the quality of its complete range of RJ 45 cords, which are certified by the 3P laboratory as compliant with the standards. [See catalogue pages](#)

■ Tests on all parameters

Legrand cords are individually tested, both for continuity and transmission performance. All the parameters are measured: CR, ACR, NEXT, Return loss, Attenuation, etc. Cords which do not meet the criteria are rejected. These tests guarantee transmission performance from one end of the system to the other, with both class D and class E.

■ Universal cords

Available in cat. 6A, cat. 6 and cat. 5e versions and in the three cabling types (U/UTP, F/UTP and SF/UTP). Legrand cords are available in different lengths, thus offering considerable flexibility of use.





LCS² FIBRE OPTIC

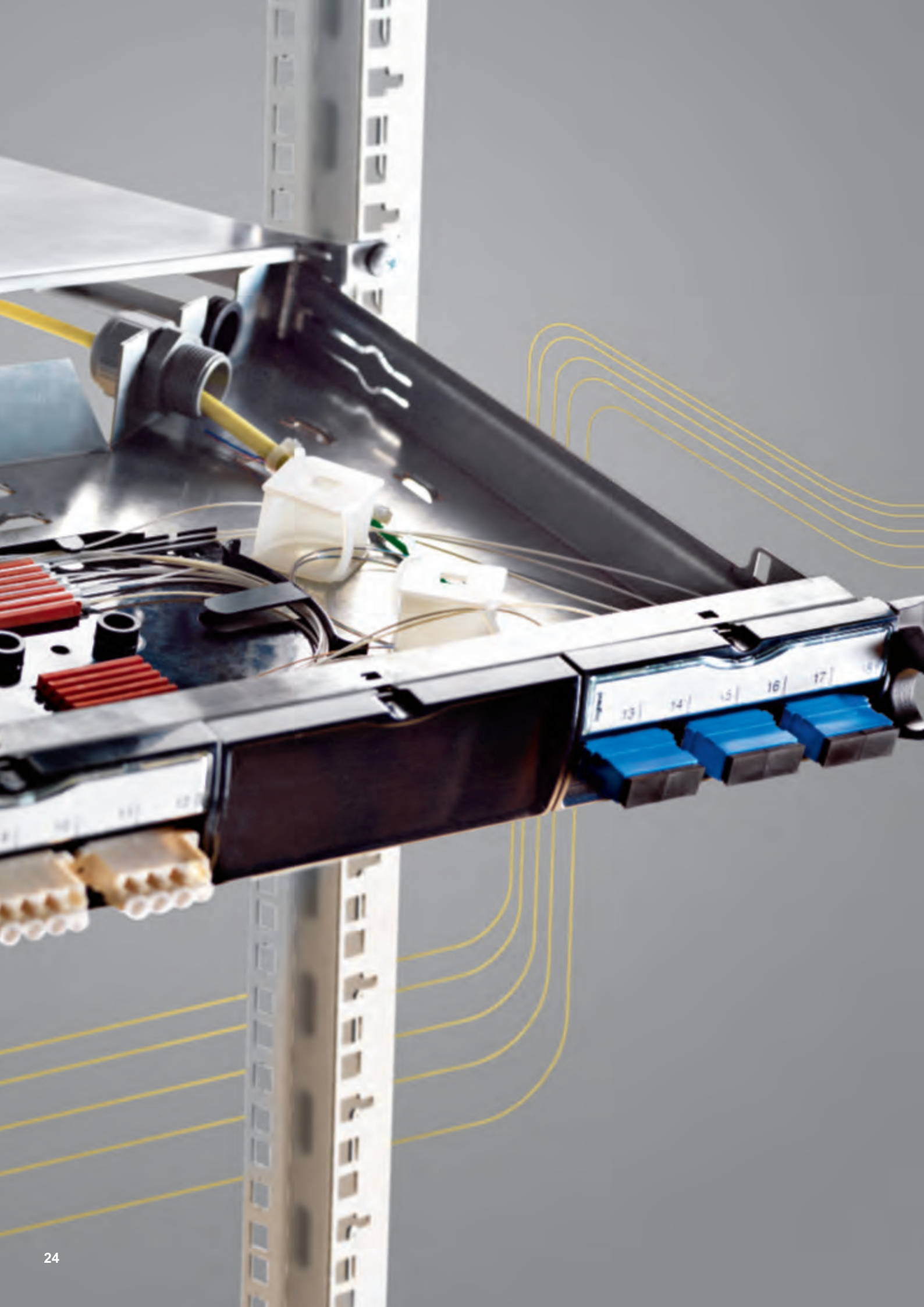
A simple and reliable option



Fibre optic drawers
See pages 24 to 25



Connecting fibres
See pages 26 to 27



LCS² Fibre optic drawer

Complete accessibility and ease in coiling

The new LCS² Fibre optic drawer gives a better comfort in installation and maintenance.

Reinforcements facilitating the opening and closing, end stop inclined at 30° for complete accessibility, coiling the fibres ensured by the in-built coiling accessories...



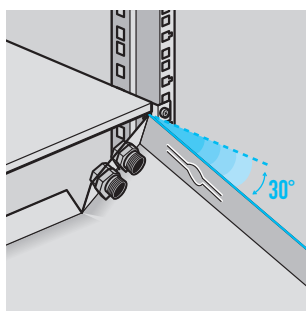
19" Fibre optic drawer

Up to 4 fibre optic blocks can be fitted:
from 24 fibres ST or SC, 48 fibres LC.
Equipped with grip handles.
Height: Modular 1U.



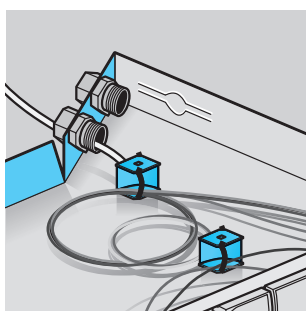
19" High density fibre optic drawer

Up to 3 fibre optic blocks can be fitted:
from 36 fibres ST or SC, 72 fibres LC.
Equipped with grip handles.
Height: Modular 1U.



Total accessibility

End stop, inclined at 30°.



Easier cable management.

Integrated coiling accessories.
Rear in the form of a tail
to facilitate connection of incoming
cables.

**Can take all
fibre optic
connector
blocks**



LC connector block
19" Fibre optic drawer



SC connector block
19" Fibre optic drawer

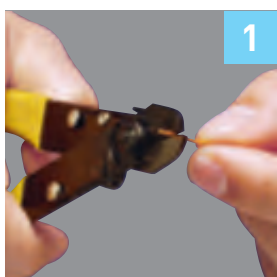


SC connector block
19" High density fibre optic drawer

Connecting fibres

Legrand simplicity and performance

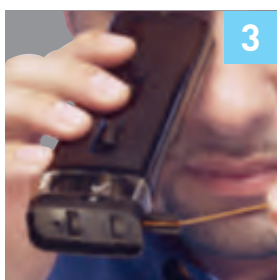
Legrand solutions, including the rapid crimping connection process and pre-fitted fibre optic links on demand have made a significant contribution to placing fibre optics within the reach of installers, particularly for links within buildings or between buildings, over distances of less than two kilometres.



Split the fibre



Cleave the fibre



Inspect the fibre



Insert the fibre

■ Connection takes just 3 minutes with Legrand rapid connectors

The average time for making this connection is less than 3 minutes with rapid connectors Cat.Nos 331 06 to 331 13 incorporating a factory pre-polished fibre. After the operations to prepare the fibre, there is no longer any need to glue or polish, or to check the quality of the connection under a microscope! No oven, no drying. The factory pre-polished connectors and the crimping tool ensure that the operation is simple and results in a high-quality connection.

Tip

Consider leaving some fibres in reserve for future development of the installation. If you require 2 or 4 fibres now, install cables with 6 or 8, or if you require 6 to 8 fibres now, install cables with 10 to 12.



Align the fibre



Crimp the fibre

Pre-fitted fibre optic

Pre-fitted fibre optic links on demand: save time and cut risk to a minimum.

Order your own individual solution: pre-fitted and factory tested, it will save you time on site while ensuring a high level of link reliability. This minimises the risk of malfunction during the installation, thereby simplifying the acceptance test.

■ What is delivered?

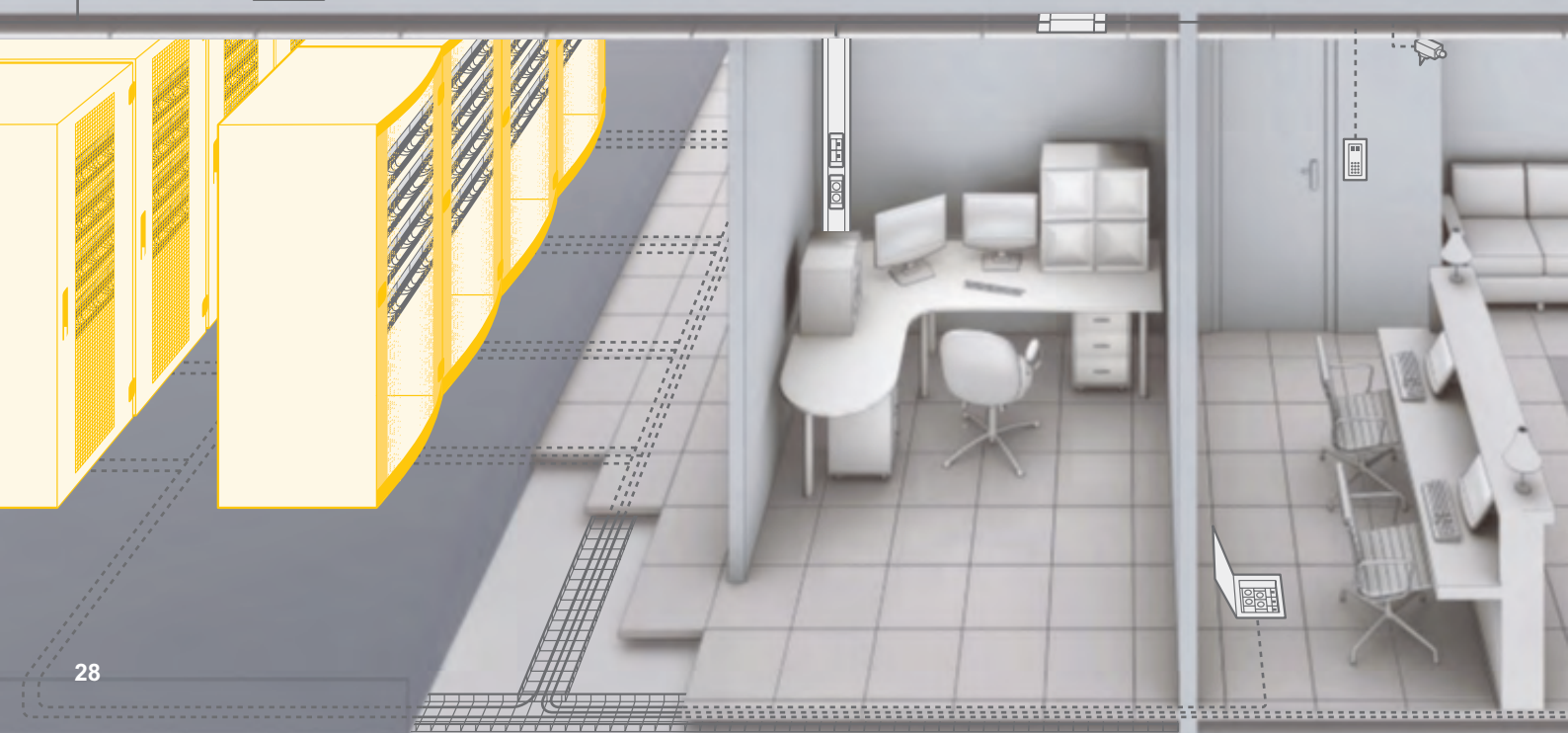
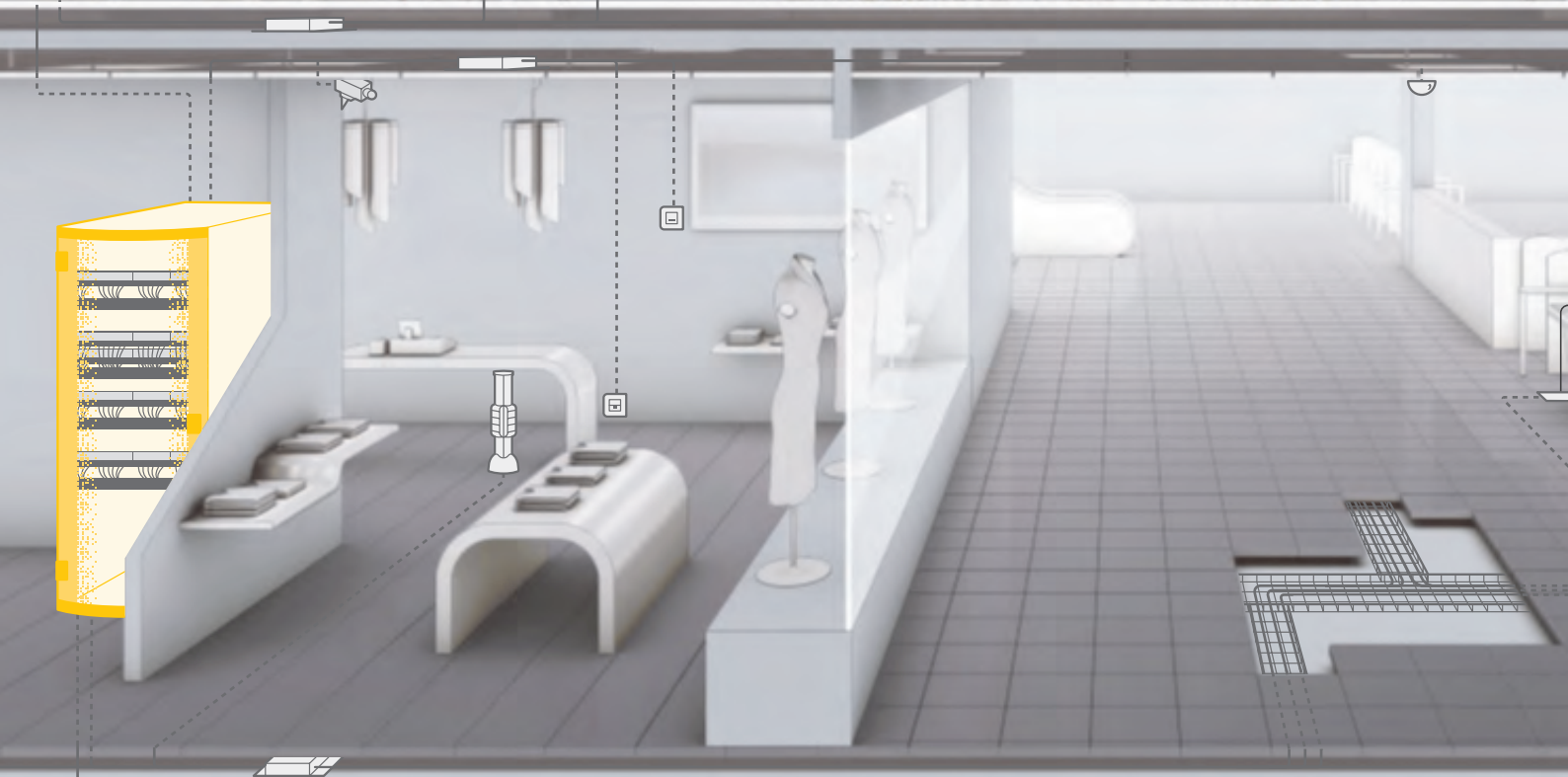
Each link is supplied with a test report. Length stands from connector to connector, in metres. Links up to 50 m are conditioned in boxes (reel optional) and those over 50 m are supplied by reel. Connectors are protected by a sheath. Pulling ring included. Multimode 62.5/125 µm cable complies with OM1 category, 50/125 µm with OM2 or OM3 category and single mode with OS1 category.



■ How to order

1. Once your preparatory installation work is done, determine the required length of cable.
2. Indicate the required type of fibre:
 - indoor, indoor/outdoor or outdoor
 - multimode 62.5/125 µm or 50/125 µm
 - or single mode 9/125 µm
 - number of cores (4, 6, 12, 24 for indoor applications, outdoor applications and indoor/outdoor applications)
3. Specify the type of connector: ST, SC or LC.
4. State your preferred form of delivery: box or reel.

For further
information
Please contact us!





LCS² ENCLOSURES AND CABINETS

Easy installation
and efficient
maintenance



Enclosures

See pages 30 to 33



Racks

See pages 34 to 35



Server enclosures

See pages 36 to 37



Wall mounted cabinets

See pages 38 to 39



19" LCS² enclosures

Optimised management of cables and patch cords

The design of the new LCS² enclosures facilitates managing the cables and patch cords.

Easy association of a unit dedicated for cords, cable entry at the top made easy, new feedthrough panels for perfect organisation of patching...



1

Enclosures

The structure allows easy cable entry at the top and bottom of the enclosure. In the case of reduced room access space the structure can be completely dismantled.



5

Respecting of the bending radius

Cable management panels with rings to guide and protect the patch cords.



2

Optimised cable management

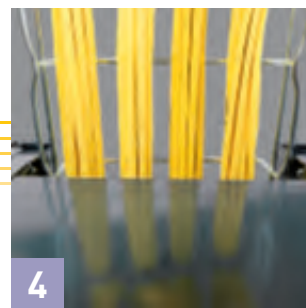
The enclosures are offering lots of space besides the 19" uprights to guide and fix large quantities of cables.



3

Linking interface

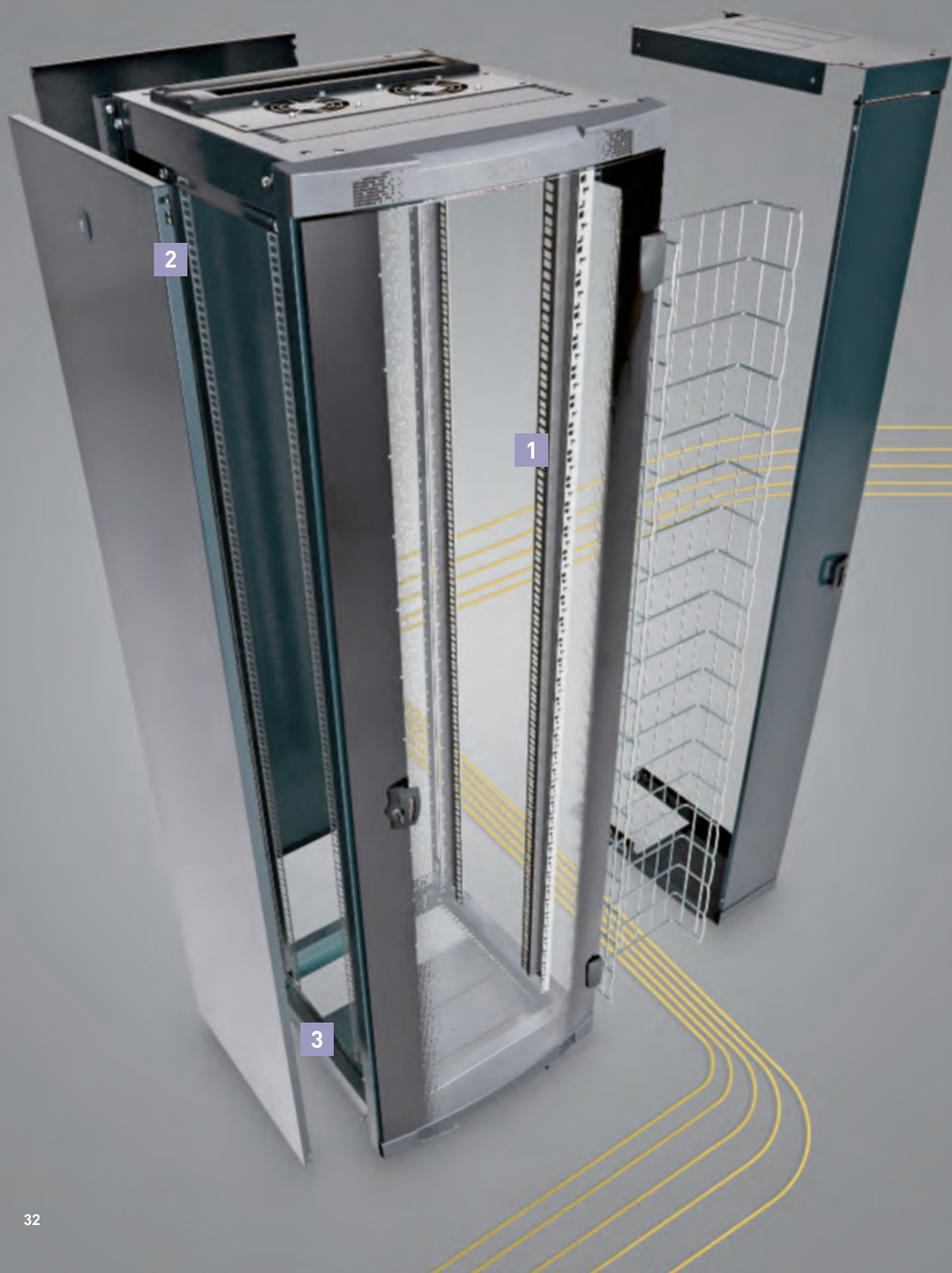
Protects the cables and guarantees the bending radius between enclosure and cable trunking.



4

Easy cable entry

Enclosure and cable management unit are equipped with pre-cuts (19") that accept cable feedthrough panels.



19" LCS² enclosures simplified assembly

The new LCS² enclosures can be very easily assembled and dismantled.

A considerable time-saving on the sites, complete accessibility thanks to the removable side and rear panels and a structure that can be entirely dismantled.



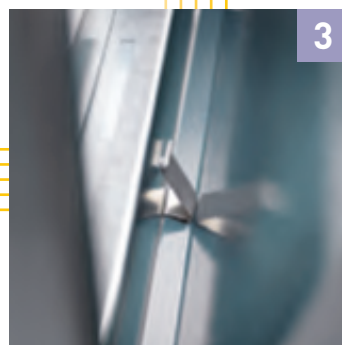
1

Easy installation
Dual marking of 19" uprights.



2

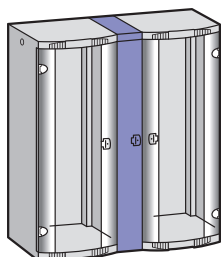
Total accessibility
A structure that can be completely dismantled.



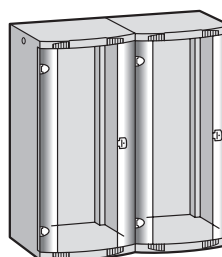
3

Automatic grounding clip
Guarantee of grounding for the side and rear panels with the automatic grounding clip.

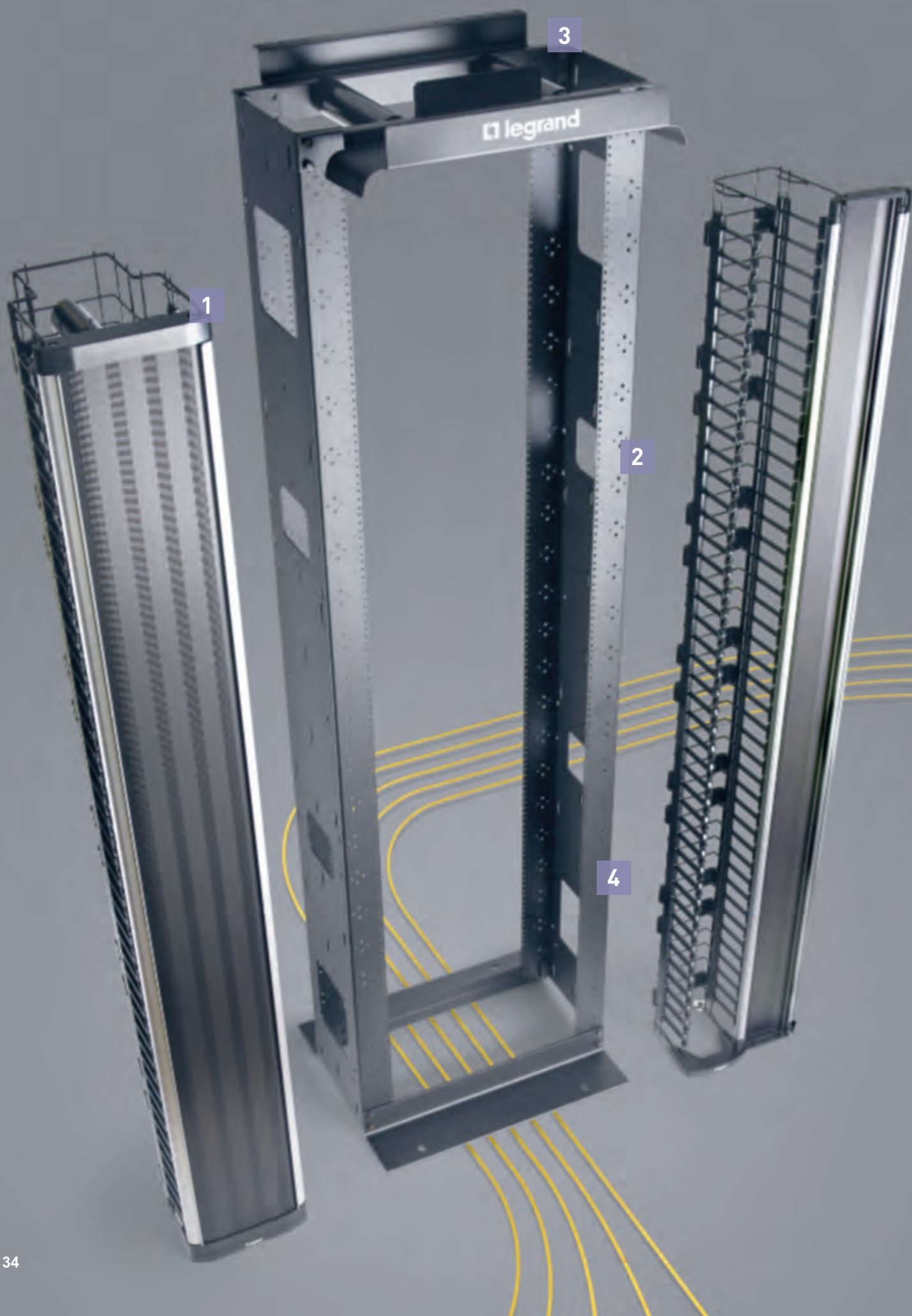
Combinations that answer various needs



Two 600-mm-wide enclosures with a cabling unit.



Two 800-mm-wide enclosures side by side.



LCS² 19" racks

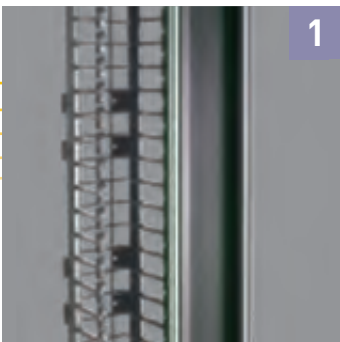
Advanced cable management

The new LCS² racks offer full cable management for optimizing your network performance.

In addition to the support strength, the LCS² cable management systems provide flexibility from the system design stage through to any future extensions.

Innovative cord management cages

With individual conduit for each rack unit and door that opens in both directions.



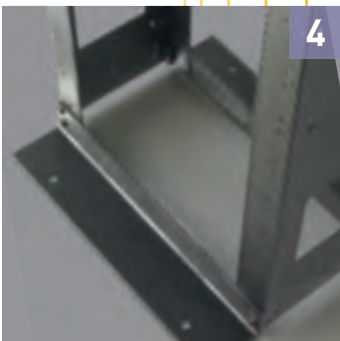
Cord management panels with cover

With conduits for vertical and horizontal cord organization.



Integrated upper trunking

For compliance with the bending radius and organized running of cords.



Light stainless-steel aluminium construction

With black powder finish, resistant to marks and scratches.



LCS² 19"

Server enclosures

Complete accessibility

The new LCS² server enclosures are designed for complete accessibility.

Complete accessibility not only via the doors and panels, but also thanks to the rooftop pre-cuts and opening of the enclosure below.



1



Doors and panels with keyless lock system

- front door with handle
- perforated front and rear doors - 80% microperforation.



2

Cable entry

- 19" High pre-cuts
- open bottom.



3

Cable ducting

Support with screwless tray fixing - Cablofil.

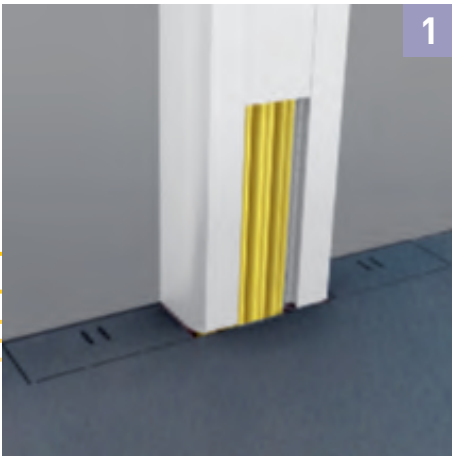


19" LCS² cabinets

Easy access, high-quality finish

The new LCS² wall-mounting cabinets can be fitted anywhere where maintaining aesthetic quality is very important.

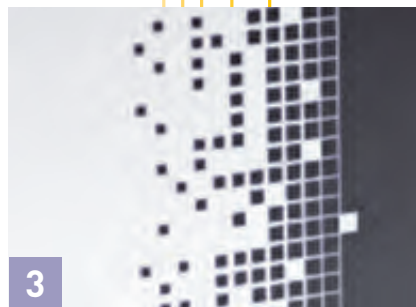
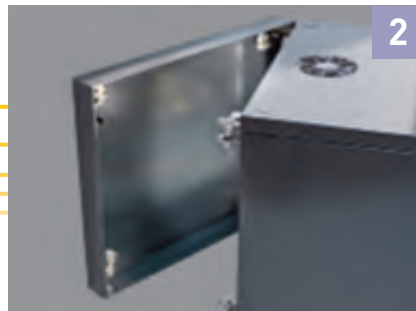
The removable side panels and flexible cable entries (in the fixed cabinets) facilitate access for quick installation and easy maintenance.



Flexible cable entries
In DLP trunking system format.

Total accessibility

Also available with pivoting body to enable easy access at the back. Removable side panels on all LCS² cabinets.

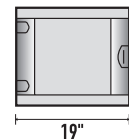
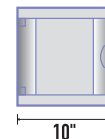


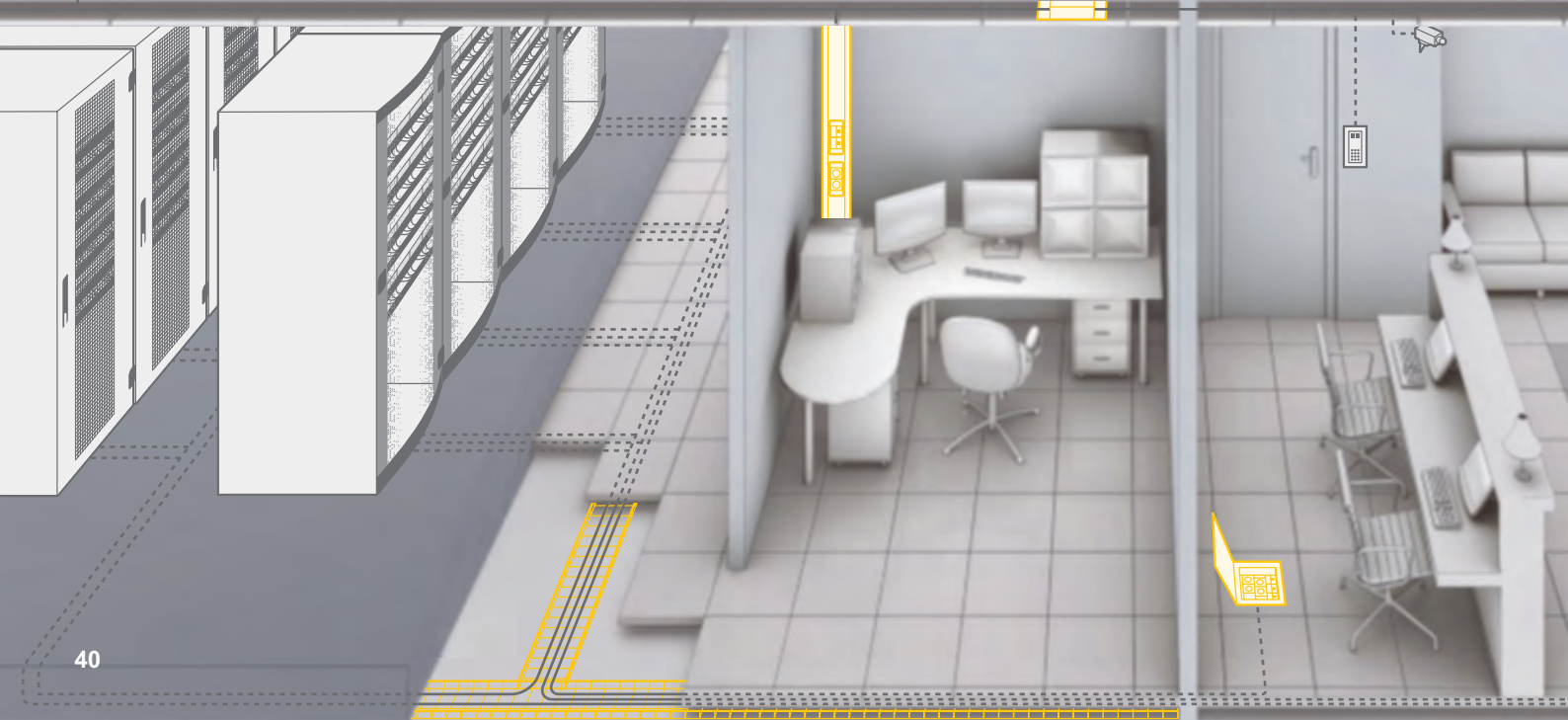
High-quality finish
Curved door, screen-printed glass.

Also available
in 10" version



Compact:
LCS² cabinet for small businesses.







LCS² WORKSTATION

The network at your hand



Zone distribution boxes

See pages 42 to 43



Installation supports

See pages 44 to 45



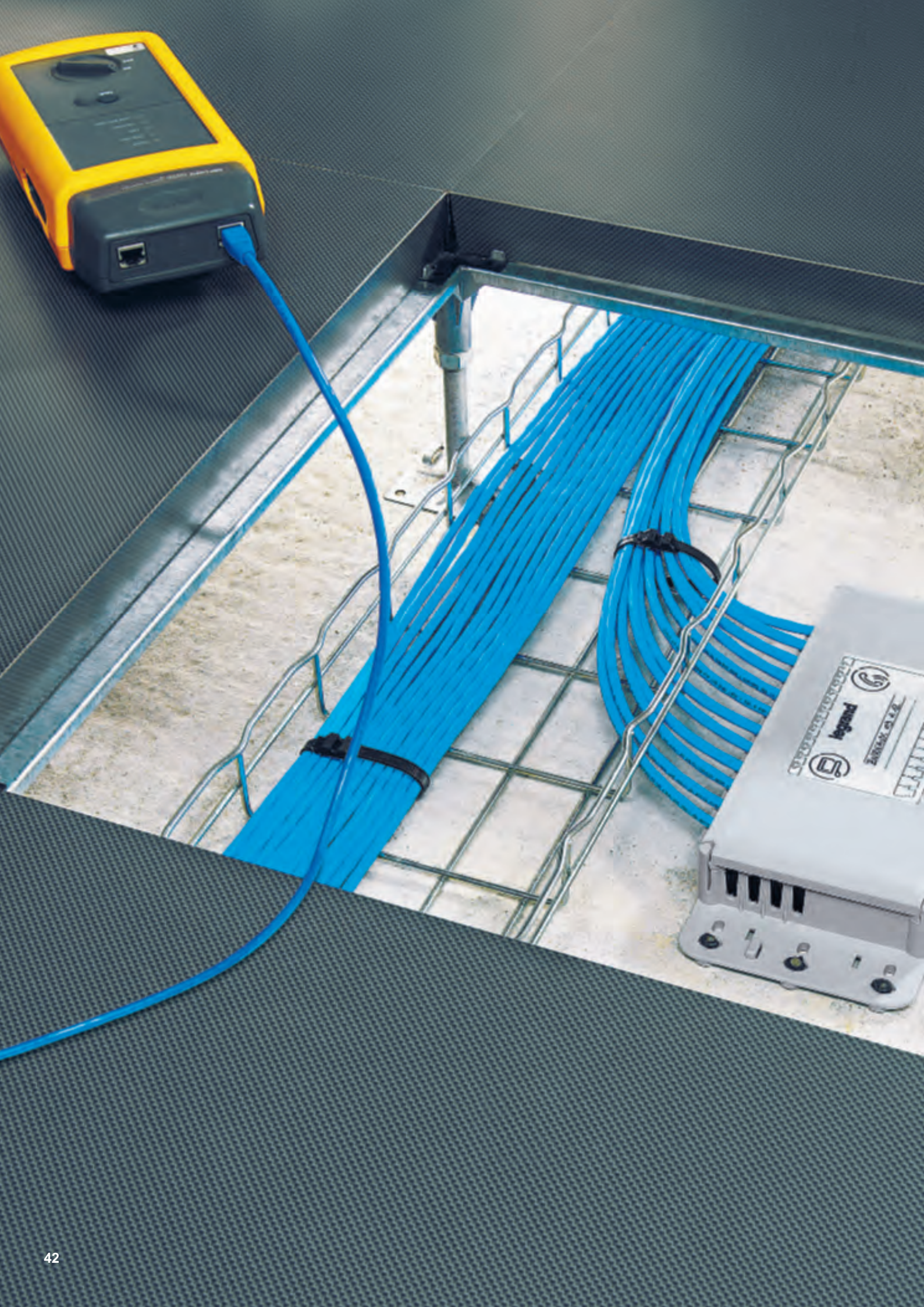
RJ 45 Sockets

See pages 46 to 47



Wi-Fi

See pages 48 to 49



Zone distribution boxes of LCS² consolidate and redistribute with complete ease

With the new LCS² zone distribution boxes connected to the Mosaic or Arteor feedthrough sockets, the result is complete flexibility.

The connections close to the workstation are centralised, copper and fibre optic are in a single box, etc. and the LCS² performances are guaranteed.



2 blocks of 6 connectors can be fitted to connect up to 12 RJ 45 sockets
Distribution close to the installation supports (see next page).

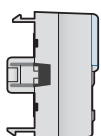
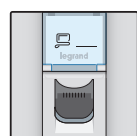


Fibre optic/RJ 45 union
Copper and fibre are placed side by side in the same box.

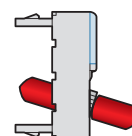
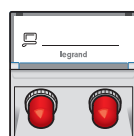


Coil rack
For fibre optic.

LCS² Mosaic or Arteor feedthrough sockets:
Quick and reliable connection, installation on all supports



RJ 45 socket with copper feedthrough for RJ 45 - RJ 45 cord.



2 x ST fibre optic feedthrough socket for optical patch cord.



Installation support cable management systems

Network within reach.

On the wall with trunking, on the ceiling with columns, on the ground with floor boxes and desktop multi-outlet extensions or nearby with blocks and mini-columns. They are suitable for all work space configurations.



Mini-columns



Columns



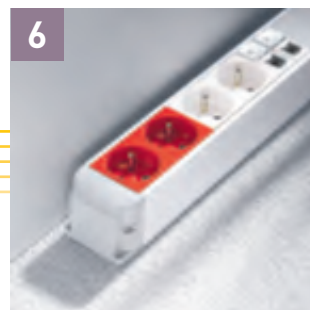
Cablofil



Snap-on trunking



Floor boxes



Desktop multi-outlet
extensions



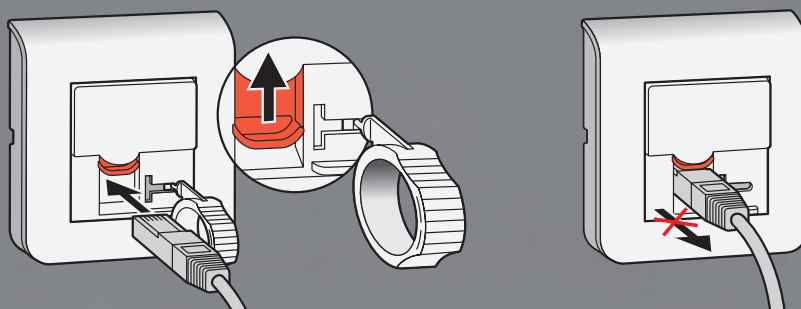
Meeting room modules



Office modules

End-to-end solutions:

Legrand cable management systems allow distribution of VDI cables and power cables from the point of entry to the workstation.



Mosaic RJ 45 socket
with controlled access

Organisation and safety with the new Mosaic sockets

In the technical room, in a false ceiling or in the floor boxes and desktop multi-outlet extensions, it is necessary to identify the special networks at a single glance.

Video surveillance, access control, adjusting the air conditioning, sensitive devices, etc. The Mosaic LCS² sockets have a coloured cover, consistent with high-current sockets.

Identify the protected supply networks

to ensure the protection of sensitive applications (for example: medical equipment).



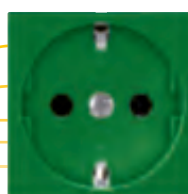
Identify and restrict access to the uninterrupted power supply networks

to ensure continuous power supply to computer equipment.



Structure the special supply networks

to isolate the specific equipment in the building.



Structure and protect the networks by insulating the sensitive applications.



Identify the sensitive information networks and control their access using a cover that can be unlocked using a key.



Structure the remote-supply networks (PoE injector) to use telephone, video applications on IP, etc.

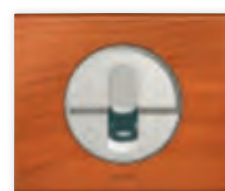
RJ 45 Sockets with high standards of Legrand accessories



Mosaic
White or aluminium



Arteor
Flow of energies



Céliane
Pleasing to the eyes



Wi-Fi that can be installed just like RJ 45 sockets

Wi-Fi access points can be fitted anywhere where unrestricted access to the computer network is required.

They can be fitted just like the RJ 45 sockets and on any supports. The stability of performance and the durability of products are guaranteed (see page 53).

Wi-Fi access points: essential mobility...

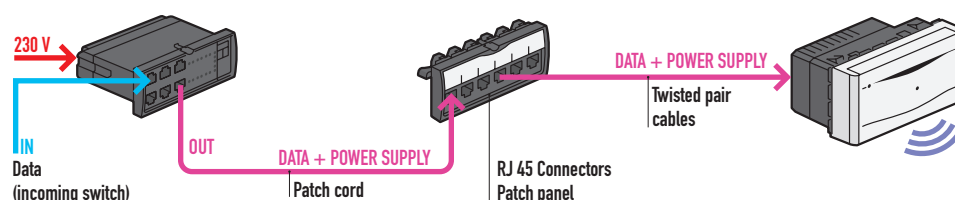
- In an environment where multiple Wi-Fi networks operate together, to optimise the available speed everywhere in the building (in compliance with 802.11 a + b/g and 802. 11 n standards).
- In reception areas and passages, to provide network access anywhere in the building (in compliance with the 802.11 b/g and 802. 11 n standards).
- In shared work areas, to connect a computer permanently and provide a wireless connection to temporary users (in compliance with the 802.11 a + b/g and 802. 11 n standards).

The Wi-Fi access points can be mounted on any support:

Columns, mini-columns, snap-on trunking, floor boxes, etc., mural or on Cablofil.



LCS² PoE injector:
Power supply to
Wi-Fi access
points from the
patch panels

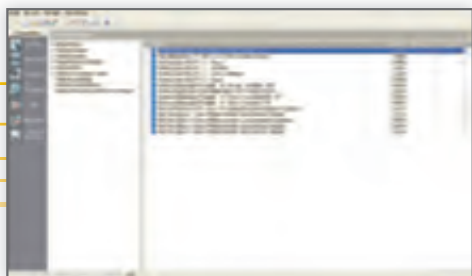




New LCS Pro² software

Your LCS² enclosure in a few clicks

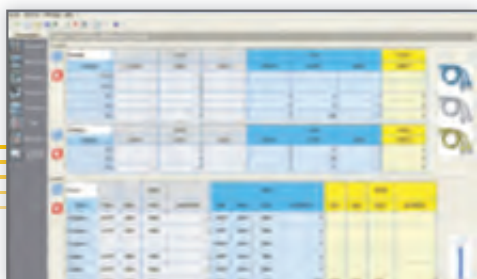
With the new LCS Pro² software, you can now very easily and quickly select your products, view your enclosure, etc.



Automatic determination
of catalogue numbers by selecting
the features and options.



Visual display of the installation
of the enclosure, modifications possible.



Easy management of studies
Technical records, purchase
orders, document printing.

For more information

Check the LCS Pro²
software downloadable from
www.legrandgroup.com



Structured cabling classes: A top-level training at Innoval

Being in close contact with engineers at the cutting edge of technological advances, Legrand trainers offer you practical classes in workshops.

These are experienced people who understand your business and speak your language. We offer you very useful and practical classes.



Comprehensive classes

- Copper installation: essential for commercial sites
- Optical fibre: use and testing of an installation
- Copper: use and testing of an installation.



Classes to understand different methods

of using an optical backbone and of connecting and testing the optical links, as per the standards in force.



Classes to convert the telephone and computer network needs of your clients into complete and upgradeable solutions, and cabling them as per the standards in force.

Assurance of performance



■ Two guarantees to ensure the durability of your installations

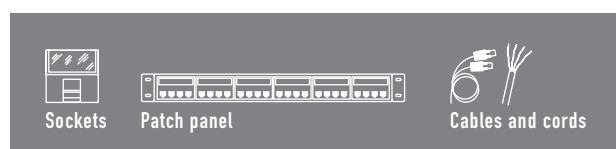
The 20-year performance guarantee:

Legrand offers the installer the guarantee of continuity of performance levels of an LCS² cat. 6A, LCS² cat. 6 or LCS² cat. 5e system on link or channel over time.

The 20-year components guarantee: Legrand offers the installer the possibility of extending the usual guarantee from 2 years to 20 years on all products used in link or channel.

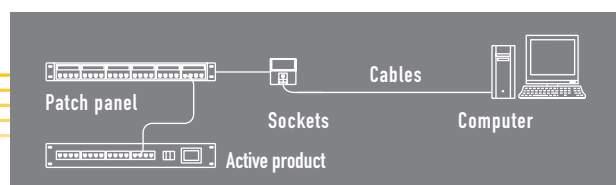
- The components guarantee of the LCS² cat. 6A, LCS² cat. 6 or LCS² cat. 5e systems: Legrand offers an extended guarantee on the components of the LCS² cat. 6A, LCS² cat. 6 or LCS² cat. 5e systems. 20 years for the components of channel or link, i.e. patch panels, RJ 45 sockets, cables and cords.

The contractual 2-year guarantee on these products is thus extended to 20 years.



- The channel performance guarantee:

A channel is defined by the standards as being an assembly consisting of the following components: patch cord, patch panel, cable, RJ 45 socket, user cord. During acceptance testing, the performance of the channel is measured over a maximum length of 100 m. It must remain constant over time.



The performance of an installation must stand the test of time.

This is why Legrand guarantees the performance and the components of its LCS² cat. 6A, cat. 6 and cat. 5e systems over the entire channel or link for 20 years.

■ Conditions of the 20-year Performance Guarantee

As with any guarantee contract, certain conditions must be met in order to qualify for the Legrand 20-year Performance Guarantee. These conditions are naturally within the capabilities of any company specialised in the installation of structured cabling systems.

The main conditions are given below (extracts from the 20-year Performance Guarantee issued by Legrand). The installer has stored the components in storage conditions suitable for their type.

The installation has been built in strict compliance with good practice and abiding by all the conditions listed below.

All the components used in the cabling system must be Legrand LCS² cat. 6A, LCS² cat. 6 or LCS² cat. 5e Cabling Systems components.

All the patch cords used must be original Legrand products.

The max. length of a cord must be 5 m.

The installation must be built in accordance with the recommendations defined in installation standards EN 50174, EN 55022 and UTE C 15-900 in force at the time of issue of the guarantee.

Prior to the signature of the guarantee contract, Legrand will check that the installation acceptance test data comply with the values specified in the standard.

The installer must submit the following 4 documents to Legrand:

- The installation acceptance test for the link or the channel
- The "14 key points of a high performance installation" form, ticked and signed as agreement on its part of having complied with the 14 points
- A full list of the products installed
- An installation diagram of the patch cabinets and the RJ 45 sockets.

Any subsequent modifications or extensions must comply with the conditions listed above.