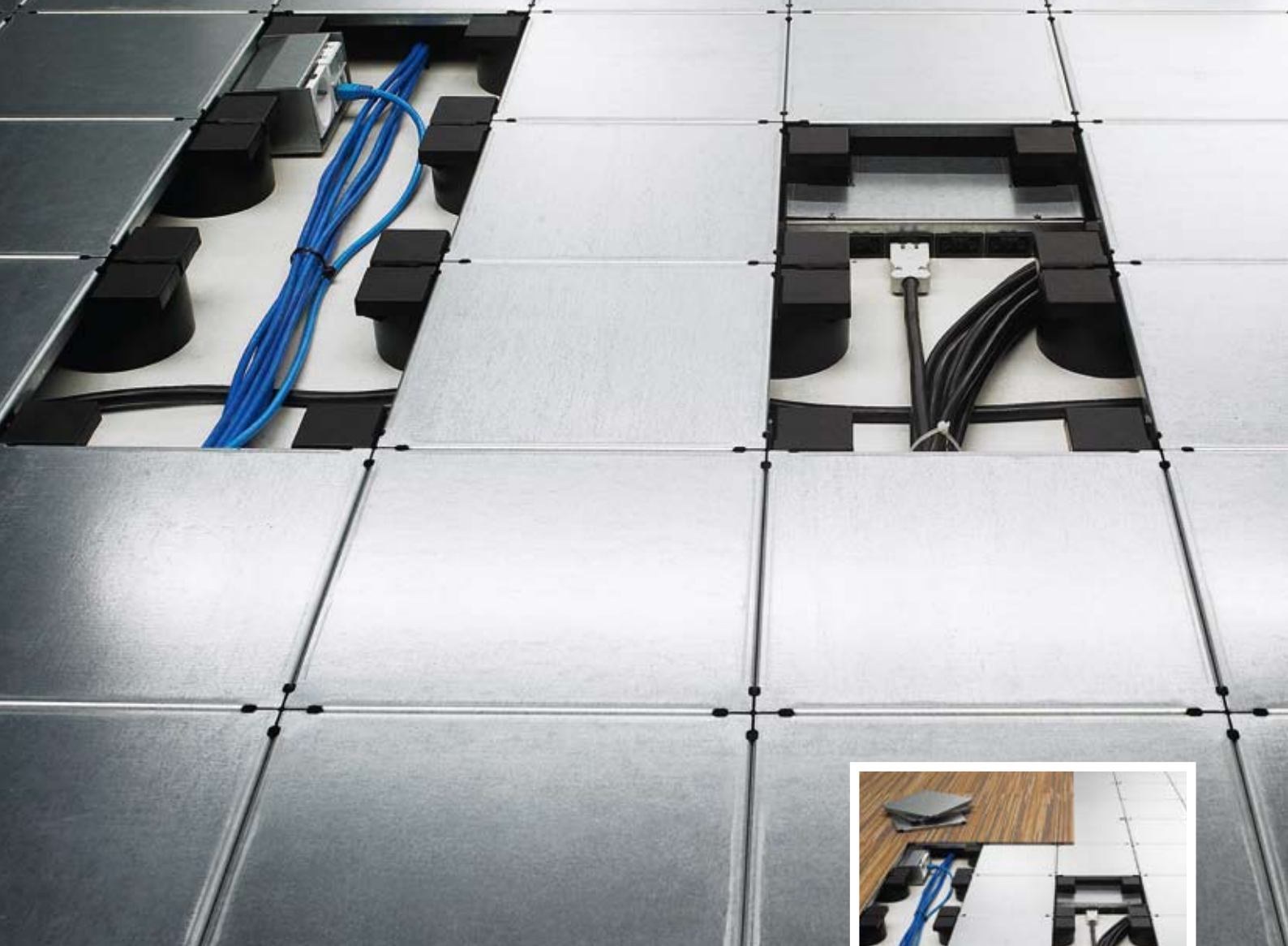
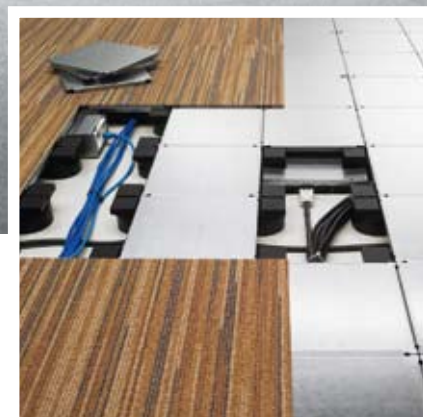


# Soluflex

Flexible • Freedom • Floor



Technical catalogue





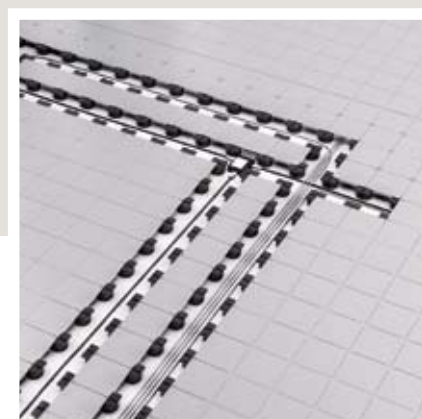
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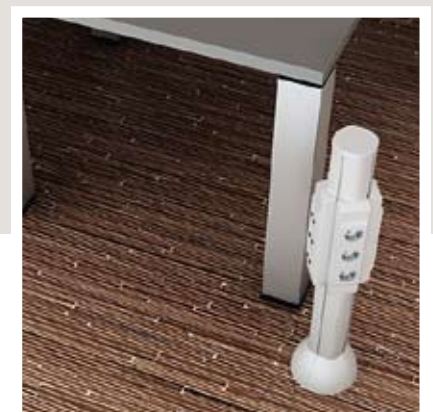
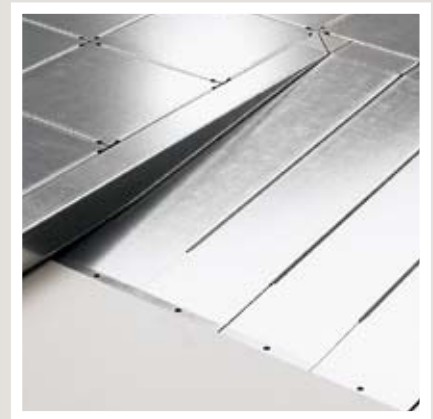
Soluflex, the clever floor system

# Flexible

Hundreds of thousands square meters of Soluflex have already been installed around the world for good reason – the Soluflex cable floor system offers flexibility. The Soluflex floor consists of 225 x 255 mm metal tiles, mounted on polypropylene supports. Underneath there is sufficient room for cabling. Cables can be placed in cable paths under the entire floor. Carpet tiles and other floor finishes, such as PVC, stone, rubber or wood, make it complete and give unlimited freedom when designing work places.

For old buildings, new housing and renovation projects Soluflex always offers the best solution. The supports come in different heights: 37, 60, 90 and 120 mm. The system is ideally suited for renovation projects. Old buildings particularly have a great need for additional electrical infrastructure, and (Soluflex height of 37 mm) makes this possible and creates maximum flexibility. In new developments, there are no limitations in the design stage as the precise location of electricity and data cables can be determined in the last phase of the building process.

The floor is quickly, easily and noiselessly installed. You can choose out of a large number of components and accessories to complete the floor system. The low plenum height means this cable floor system is self-extinguishing in case a fire starts underneath the floor. In addition to traditional floor systems, Soluflex is very low weight and easy to manage.

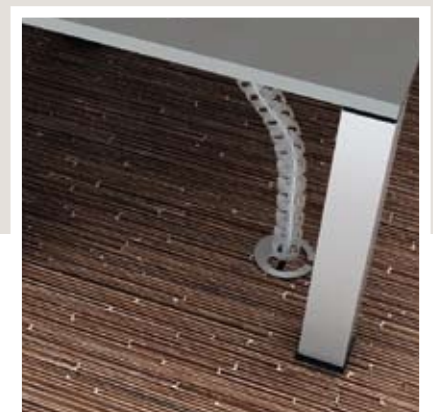




**Soluflex, the clever floor system**

# Freedom

People often don't associate a floor with freedom. Either the Soluflex cable floor system offers both designer and user the utmost freedom. Freedom in design because, really, everything is possible - the result is always a wonderful smart floor and an interior free from ugly cables. Managers of office buildings can achieve considerable cost savings when companies relocate, but on top of this, work place connections can be installed within a short time, without power cuts or data network disconnections. Reconfigurations of the office space can easily be carried out by the enduser himself, during working hours. The Soluflex cable floor system provides great freedom when installing new cables as part of renovation projects. The end users have the total freedom to meet all of their individual wishes, combined with a perfect connection to all the necessary networks. The way in which offices are arranged will no longer be determined by how the cables are installed. Located away from the wall, with glass façades in mind, this view or that amount of light - everything is possible. Untidy cables under desks are a thing of the past.





**Soluflex, the clever floor system**



# Floor

A floor is literally the base on which the work takes place. Time spent on considering the functionality of the infrastructure under the floor and looking ahead will definitely be worth the effort. By choosing this practical, flexible and attractive floor system, efficiency and productivity are boosted. Drastic conversion projects is something of the past and with a life cycle of approximately 40 years, you only need to choose Soluflex once. After that, the users will only experience the benefit.

The Soluflex cable floor system is much more than just a raised floor – it's a floor, cabling system and connection technology all rolled into one, an electronic highway under your feet. All power cables, data and telecommunications are conveniently organized and completely out of sight. A technician can easily make alterations to the system and enlargements or re-routings are very quick and easy to carry out without demolishing the building. A good investment in flexibility, freedom, ease of use, endurance and simplicity.





Soluflex, the clever floor system

# Why choose Soluflex?

## Architects

- Great freedom of design, no suspended ceiling required, glass walls from the floor upwards are also possible
- This cable management system is in case of fire self-extinguishing
- Low weight of the floor, compared to traditional raised floor
- Wide choice of floor covering like carpet, rubber, PVC, wooden and stone tiles
- All materials can be recycled
- Very high performance, up to 6 times more distributed load capacity than traditional raised floor systems
- Sound insulation: like walking on a concrete floor, no hollow sound production

## Facility manager

- Enormous cost savings when relocating
- Freedom of choice in carpet tiles and other floor coverings
- Workplace connections to be realised in a very short time without interruptions or disconnection of power or data connections
- Reliable and simple system
- Enormous freedom of cabling and cabling capacity in renovation projects
- Workplace changes simple to realise by your own staff
- Changing of office configurations. Fast, no skilled labour required, no limits to frequency of churn rate
- Shell&Core projects: easy to install flooring in a late stage, tenant can make final decisions last minute

## Investor/project developer

- Shell&Core projects: tenants can make choice in a very late stage without facing any disadvantages later on
- Complete floor can be moved to another location whenever needed
- Installation has no impact whatsoever on the building structure; no drilling of any kind

## New buildings

- Long life cycle
- The user can optimally arrange the office
- Building and office space can be changed or partitioned economically when there is a change of user

## Renovation

- Low height
- No or minor adjustments of the building required
- Maximum room to move
- Simple renewal of carpet tiles (no stripping of tiles)

## Electrical adviser / M&E consultant

- Unlimited cable capacity
- Free arrangement of outlet units
- Outlet units can be determined in a very late stage
- Cable management system with integrated outlet units to be arranged according to the requirements of the client
- Various options of outlet units available
- Earthing only once per 100m<sup>2</sup>
- No cable damage possible thanks to round supports

## Installer / Contractor

- Installation possible in a very short time: double as fast as traditional raised flooring systems
- Various prefab systems available
- Changes or adjustments to the system can be made at a later stage if necessary
- Cable management system is available including installation
- Various client-specific solutions available
- No skilled labour required
- No leveling of the floor required
- Small tiles, extremely easy to handle and easy to cut
- Easy stocking and less space consuming than traditional raised flooring systems
- Optimal transport features, a container fits double the amount of m<sup>2</sup> than a traditional raised floor system





**Soluflex, the clever floor system**

# Technical details

## Material

- The floor tiles are made of pregalvanised steel, according to EN 10326.
- The supports are made of recycled polypropylene.

## Weights and measures

- Dimensions of tiles: 225x225 mm.
- Available in four different heights: 37, 60, 90 and 120 mm.
- Weight of the Soluflex® cable floor system, approx 20 kg/m<sup>2</sup>.
- Maximum uniform distributed load: 3,000 N.
- Maximum point load per tile/support: 1500N/ 625 mm<sup>2</sup>.

## Acoustic characteristics

Flanking air sound insulation in accordance with ISO 717-1: 1996. Tested according to ISO 140-12:2000

- Soluflex® cable floor system without mineral wool underneath the partition wall: 48 dB.
- Soluflex® cable floor system with mineral wool underneath the partition wall: 60 dB. Vertical impact sound insulation improvement in accordance with ISO 140-12:2000
- Soluflex® cable floor system with carpet and without mineral wool underneath the partition wall:  $L_{n,f,w} = 49\text{dB}$ .
- Soluflex® cable floor system with carpet and with mineral wool underneath the partition wall:  $L_{n,f,w} = 39\text{dB}$ .

Vertical impact sound level of a floor finish in accordance with ISO. The improvement in soundproofing is measured in the underlying floor.

- Impact sound insulation of a floor finish according to ISO 717-2:1996. Tested according to ISO 140-6:1998

- Concrete floor 140 mm + Soluflex  
 $\Delta L_w = 17\text{ dB}$   
 $\Delta L_{lin} = 7\text{ dB}$
- Concrete floor 140 mm + Soluflex + carpet tiles  
 $\Delta L_w = 24\text{ dB}$   
 $\Delta L_{lin} = 12\text{ dB}$

## Other features

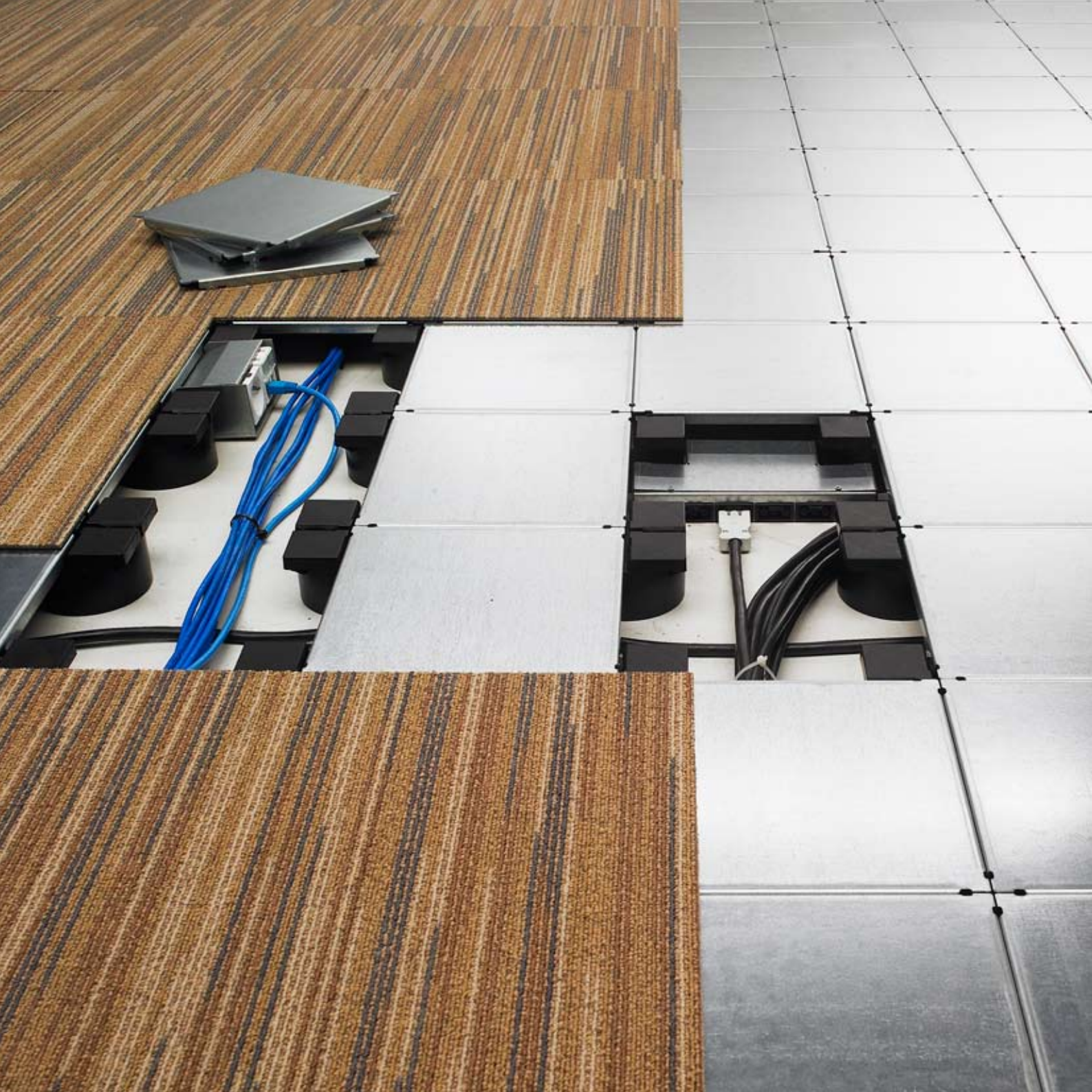
- The sub-floor should be dry, clean and levelled, suitable for carpeting.
- The cable floor system feels steady. Since the floor is not adjustable in height, it needs no later adjustment.
- The diagonal structure of the Soluflex floor means the cables are perfectly parallel, and you can cross data cables at the required angle of 90°.

## TNO fire

Fire resistance.

The low plenum height means that the cable floor system is self-extinguishing.

- NEN-EN 13501-1:  
B(fl) S1-d0
- NEN 1775:  
A - Inflammability – Complies with the class T1 criteria for inflammability.  
B - Horizontal flame spread: All thicknesses – maximal horizontal flame spread = 0 cm, signifying a critical heat flow density of more than 11 kW/m<sup>2</sup>. Classification according to NEN 1775: Class T1.
- NEN 6066:  
For maximum heat flow of 50 kW/m<sup>2</sup>: Maximum indicative smoke density less than 0.5 m<sup>-1</sup>, signifying a very weak smoke emission in the case of fire.



Soluflex, the clever floor system

# Four standard floor heights

## **Soluflex H = 37 mm**

The 37 mm high version has been developed especially for renovation projects. Under less than 4 cm floor elevation all thinkable cabling is possible without cutting or breaking. Maximum room to move, remains above the floor. Also old rooms with low ceilings are updated this way. If the door doesn't allow further elevation of the floor, then you can begin installing the cable floor system a little bit further by using special ramps.

The high-tech of the Soluflex cable floor system is hidden under a taut and neutral look, a major advantage with the renovation of characteristic old buildings.

Old buildings are equipped for ready for the requirements of the future without affecting the authentic atmosphere.

## **Soluflex H = 60 mm**

With this height you can use special wiring devices, junction boxes and plugs, plus the traditional accessories you already know. The possibilities are unlimited. The wiring devices are flush and invisible. There are outlet units of the size of one tile as well as large lid & frame assemblies of the size of four tiles. For electricity, telecommunication, data traffic or for all possible combinations. You can compose the outlet units yourself, but you can also choose for pre-wired models. The cabling can be led up with a cable worm from the floor direct to the desk. It is also possible to have connections on the workplace itself without loose cables lying about.

## **Soluflex H = 90 mm en 120 mm**

The 90 mm & 120 mm high Soluflex floor also leave enough room for bulk cabling and outlet units. Specially for your application in data centers, server rooms or solutions with air conditioning or pipes integrated in the floor. Various models of pre-wired lid & frame assemblies are available. The cabling can be guided up further from the floor. It is even possible to make connections at the workplace itself. Built-in tiles are available for mounting lid & frame assemblies in the traditional shapes square, round and rectangular. The traditional wiring devices fit into these. You can create the outlet units for electricity, telecommunication and data yourself in these lid & frame assemblies.

A wide range of floor boxes are available for direct access to your connections.

The fully submerged units standard for the floor height 60 mm are also available with a height of 90 mm & 120 mm on request.