

# KINGSPAN NEWS



THE NEWSLETTER OF KINGSPAN ACCESS FLOORS

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## BIG DEMAND FOR KINGSPAN FLOORING IN DATA CENTRES

DUE TO THE GROWTH OF DIGITAL TECHNOLOGY IN ALL AREAS OF BUSINESS, KINGSPAN IS CONTINUING TO EXPERIENCE HIGH LEVELS OF DEMAND FOR ACCESS FLOORING IN DATA CENTRES.

As the UK's leading supplier of raised floors to this market sector, we have been consistently supplying volumes of approximately 100,000m<sup>2</sup> each year, and we expect data centre growth to continue for a number of reasons:

- Following the 9/11 attack and the regulatory influences that followed, the financial institutions in particular are replicating their on-site data storage in new off-site centres.
- Other companies are going to independent off-site providers because they are finding that the cost of using their own prime office space for substantial data storage is too high, and there are major power and cooling implications (many buildings are simply not designed to carry a 10MVA load).
- The growth of emails, electronic financial transfers, the internet and in particular on-line retailing, is driving an ever-increasing need for more data centre space.

Kingspan's unrivalled experience in this sector makes us the ideal access flooring supplier. Consider the following:

- We have been supplying this sector for many years and have met needs ranging from 2,500m<sup>2</sup> of flooring through to 40,000m<sup>2</sup> and beyond.



*Kingspan access flooring in a UK data centre.*

- We have wide experience of working with customers to meet their needs – covering everything from load bearing through to cooling and static dissipation requirements.
- All our products and services are backed up by our unique Total System Warranty, which guarantees the performance of our systems for an unprecedented 25 years.

Bear in mind that one room in a data centre can be dealing with £100 million of transactions every single day – imagine what would happen if the floor collapsed or if static electricity built up from the floor and began to disrupt the computers! With Kingspan, data centre

operators do not have to consider such nightmares because our flooring is tried and tested (extremely well tested in fact, both in-house and by external bodies) and we have an excellent track record in this sector.

### HOW YOU CAN FIND OUT MORE

**To find out more about Kingspan's work in the data centre sector, read through this special issue of Kingspan News or contact us for more information on 01482 781701.**

# KINGSPAN R&D PROVIDES DATA CENTRE FLOORING SOLUTIONS

## KINGSPAN IS WORKING WITH M&E CONTRACTOR TO INCORPORATE RAISED FLOORS INTO A MODULAR SYSTEM

FOLLOWING AN INCREASE IN DEMAND FROM THE DATA CENTRE SECTOR AND OTHER INDUSTRY SECTORS FOR SOME AREAS OF A BUILDING TO BE CONSTRUCTED OFF-SITE AND SUPPLIED IN MODULAR FORMAT, KINGSPAN IS WORKING WITH A MECHANICAL AND ELECTRICAL CONTRACTOR TO INCORPORATE RAISED FLOORS INTO A MODULAR SYSTEM.

The 'modular' system we are developing comprises a top frame

which carries the floor and from which services may be hung, and a lower frame to provide stability and support for services.

There is a 1200mm span across the width to accommodate large HVAC ductwork and services. The top and bottom frames are connected by vertical tubes, and the lower frame sits on adjustable feet, which can be set and locked from the top of the assembly, so removing the need to disturb any services.

A number of these modules may be installed, with the gaps between set by the floor panel module. An intermediate clip-on stringer on the frames helps to support the panels at mid span.

The panel locating caps are designed so that unwanted locators may simply be snapped off, for instance when working to a perimeter.

The mid span caps have built in height adjustment to accommodate any small deviations in frame straightness.

## KINGSPAN LAUNCHES NEW SUPER HEAVY SYSTEM TO CARRY GREATER LOADS IN DATA CENTRES

DATA CENTRE FLOORS ARE HAVING TO CARRY GREATER LOADS AS MORE COOLING EQUIPMENT IS ADDED TO COMPUTER AND SERVER CABINETS TO DEAL WITH THE INCREASED HEAT THEY ARE GENERATING AS A RESULT OF THE MASSIVE FLOW OF ELECTRONIC INFORMATION.

Whilst the general PSA categories have been for Medium, Heavy and Extra Heavy grade flooring systems, Kingspan is now seeing a requirement for loadings that

exceed even the Extra Heavy rating. We have responded to this need by developing a Kingspan Super Heavy system with a new pedestal and stringer design, as well as devising a system for strengthening floors that have already been installed.

For example, a standard heavy graded floor can be improved to raise its load bearing capability with minimum impact on the sub floor services and minimum disruption. Changes to an existing floor

can include the addition of cross bracing and lateral bracing where services potentially impinge. On top of the floor, the cabinets sit on steel beams running the length of the cabinets to help dissipate the load through the floor, which would otherwise be overloaded.

**FOR MORE INFORMATION  
ABOUT THESE INITIATIVES  
CALL OUR TECHNICAL TEAM  
ON 01482 781701.**



*Zinc whiskers in close up.*

## DATA CENTRES AND ZINC WHISKERS

QUESTIONS HAVE BEEN RAISED IN SOME SECTIONS OF THE INDUSTRY ABOUT THE POTENTIAL FOR ZINC WHISKERS TO AFFECT THE ELECTRONIC SYSTEMS WITHIN DATA CENTRES.

Zinc whiskers are tiny conductive filaments of zinc that may grow from some metal surfaces that have been

coated with zinc. However, all Kingspan access floors are produced using the hot dipped galvanized steel method, and zinc whiskers have never been identified on any hot dip galvanized steels.

We are sometimes asked for a "zinc whisker free" pedestal/understructure, and in such cases we can offer a nickel plated alternative for all of our pedestals.



*Kingspan access flooring being installed in a data centre in the UK. Clients have the option of a range of different finishes.*

# WE CAN SUPPLY TO SHORT LEAD TIMES AND AT COMPETITIVE RATES

DATA CENTRES OFTEN HAVE A REQUIREMENT FOR FINISHES BONDED TO THE SURFACE SUCH AS VINYL OR HIGH PRESSURE LAMINATES. HISTORICALLY THESE FINISHES HAVE BEEN HAND APPLIED, RESULTING IN EXTENDED MANUFACTURING PERIODS AND POSSIBLE QUALITY ISSUES.

However, following Kingspan's £750,000 investment in a fully automated production line just for finishes, we can offer products for the data centre sector to short lead times and at competitive rates.

Because of the very nature of data storage, this business operates in a secretive and high tech world. We can tell you, however, that one of our global customers has nearly 100 data centres with a combined floor area of 600,000m<sup>2</sup> and we are currently working with this customer on a 5,000m<sup>2</sup> second phase contract in the UK. We also supplied the first phase, which was 10,000m<sup>2</sup>.

We are also presently working on 15 other data centre contracts in the UK and overseas, ranging from small volumes through to more than 20,000m<sup>2</sup>.



*A Kingspan data centre installation.*



*Kingspan's air plenum test area.*

## MEETING ALL CLIENT NEEDS

KINGSPAN'S DATA CENTRE CLIENTS INCLUDE GOVERNMENT DEPARTMENTS, THE INTELLIGENCE SERVICES, INSURANCE GROUPS, BANKS AND OTHER FINANCIAL INSTITUTIONS.

We can supply raised floors to meet a wide range of client needs. For example, in some instances we have installed two separate raised floors – one on top of the other – to ensure that the IT services are completely segregated from the air plenum.

We can also advise on all aspects of ensuring that the air plenum provides effective air flow to cool the IT equipment.



# DATA CENTRE DEMAND GROWS THROUGHOUT THE WORLD

THE DEMAND FOR DATA CENTRES IS GROWING THROUGHOUT THE WORLD, WITH RUSSIA SHOWING PARTICULARLY STRONG GROWTH.

Kingspan has supplied 4,000m<sup>2</sup> of raised floors for the DSP-3 data centre in Moscow and is currently working on an 8,000m<sup>2</sup> contract for the Russian bank, Sberbank, again in Moscow.

Kingspan's customer for both these orders is the Russian based fit-out contractors K Concept.

Kingspan Commercial Director Rachel Mumford said: "This customer is relatively new to Kingspan and to the access flooring industry so we were able to provide them with detailed input on floor requirements and they have been very

helpful to us from a logistics point of view."

The DSP-3 order involved supplying FDEB vinyl finish flooring with a 570mm void, and for Sberbank Kingspan is again supplying vinyl finish flooring, this time with a 810mm void. The first containers are now arriving in Russia, and completion of the project is due in the Spring.

"Kingspan had to work to very tight lead times to meet the deadlines for both contracts, but because of the substantial investment we have made in our production facilities we were able to respond and complete manufacture of the product within just a few weeks. This is another example of how our manufacturing facilities now enable us to

deliver to customer demand, whatever that may be," said Rachel.

Emilio Alvarez, Project Manager of Mercury, the contractors, said: "I have been working on a few projects in recent years with Kingspan and K Concept and I can say that they always do their best to meet client's requirements and provide the best service."

"They won the tender for this contract in a fair competition because they provided the best relationship between price and quality," he added.

Kingspan has also supplied its FDEB floor range for several data centres in Paris and also in Ireland, where again the contracts were time critical.

## HOW TO CONTACT KINGSPAN

For more information about the articles in this newsletter or about Kingspan's access flooring ranges and services, you can:

- Telephone: 01482 781701
- Email: [info@kingspan.com](mailto:info@kingspan.com)
- Visit [www.kingspanaccessfloors.co.uk](http://www.kingspanaccessfloors.co.uk)

Kingspan Access Floors Ltd, Burma Drive,  
Marfleet, Hull HU9 5SG



**TOP:** Kingspan raised floors being installed in the DSP-3 data centre in Moscow.

**ABOVE:** The exterior of the data centre.