**Central** 

**Control** 

System

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# System

Electric floor heating is not a central domestic system, which means that the heat is virtually "produced" inside the very rooms to be heated, and the maintaining of the comfort room temperature is supervised by the temperature controllers, each for one room or a single heating zone. Until recently, the central control of such independent temperature controllers meant the necessity of installation of additional room wiring, and additionally placing in one of the rooms - next to the temperature controller - the central controller, governing the remaining elements of the system.

Elektra has just introduced to our offer the wireless central control system. The heart of the system is the central controller OCS4 which governs the satellite controllers, as well as features the built-in thermostat, which saves us the cost of two independent devices.

### **HOT news**

# **NEW**PRODUCT

UltraTec is an ultra-thin single-side supplied heating cable, with a power rating of 10W/m, created especially for the systems set in the adhesive or the self-leveling compounds, in the rooms of complex shapes and extremely limited availability to raise the floor level.

It is especially suitable for the floors in the buildings under renovation, as well as the newly constructed ones. Ultra-thin

UltraTec\*

Its' characteristics are comparable to the ELEKTRA DM heating cables. However, what makes it different from the classical DM solutions is the Teflon insulation and the sheath of the new heating cable. Thanks to this innovative solution, the cable features very high flexibility and high durability to chemicals and elevated temperatures. UltraTec's cross-section is elliptical, with the dimensions 2x3mm.

\* The new UltraTec heating cable will be available in our offer starting from March 2011.



Construction of the ELEKTRA **UltraTec** heating cable.



ELEKTRA UltraTec

- Multi-wire heating core
- PEP (Teflon) insulation layer
- 3 Tinned copper braiding
- 4 FEP (Teflon) outer sheath

NEW PRODUCT

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The central controller services up to 16 satellites OSD4, communicating wirelessly inside rooms up to 40m. If the distance to the furthest satellite exceeds 40m, it is possible to use one of the remaining satellites as the signal relay. The OCS4 central controller features the function of the control of the setback of the electric

Central Control System

heaters, using the wireless temperature setback module OSA4.

Both the installation and setup are "a piece of cake", and the system significantly saves costs, as each of the controllers realizes the program and adjusts the temperature level precisely to the User's requirements.





# constructions of Cables

results have been achieved due to the reliable cable constructions, and utilization of the best market-available materials and know-how.

Construction of the ELEKTRA heating cable.

ELEKTRA always strives to achieve and

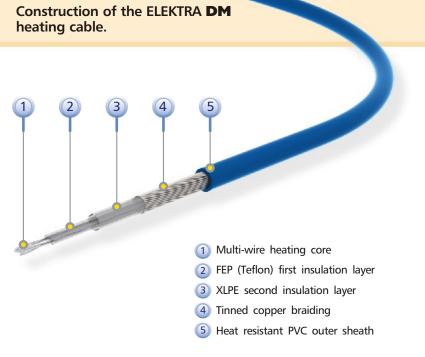
provide the highest possible quality of

its products to our Clients. The optimal

As the constructions of our cables highlight in comparison to the ones available on the market, we have commenced the series of presentation graphics, featuring the characteristics of the ELEKTRA cable construction.

The multi-wire heating core ensures – as opposed to the widely available on the market single-wire construction – higher flexibility and durability against mechanical damage, simultaneously increasing the cable's longevity. Another crucial feature of the ELEKTRA DM cable's construction is the twin insulation made of fluoroorganic material (FEP/Teflon) and cross-linked polyethylene (XLPE).

This solution will increase the mechanical and dielectric durability, positively influencing the life span of the entire heating system. Still one more feature, clearly outstanding from the competitors' offer, is a highly reliable cable spiral braid made from tinned copper wires, virtually ensuring 100% cable cover, which significantly increases the safety of cable's operation from the perspective of the Users. Application of spiral braiding instead of the usual braiding minimizes the external diameter of the cables, thus simplifying the installation procedure.





The multi-wire heating core ensures similarly to the previously mentioned DM cables - a higher flexibility and longer life span of the cable. Additionally, during the installation works, the risk to damage of the heating core is significantly reduced. The screen made from tinned copper wires and AL/PET foil would increase the mechanical durability thus ensuring 100% electrical shock protection. The construction clearly stands out in comparison to the ones available on the market utilizing only one or a few copper wires placed alongside the heating cable. Thanks to the external sheath made of the UV- and heat-resistant PVC, the VCDR cables are ideally suited for the purposes of anti-ice and snow protection of roofs, gutters and downpipes.

## **HOT news**



#### **ELEKTRA** INFORMATION

#### **ELEKTRA** takes part in the project:

"Czajka" Waste Water Treatment Plant was entered into operation in 1991. The plant is located in the north part of Warsaw, Poland, on the right river bank. It occupies the area of 52.7ha, and after the modernization works will have been completed, it will become the largest plant of this type in the whole Europe.

The contract is worth approximately EUR519mln. The new investment includes the replacement of the old machine line with the new one, which will be state-of-the art and fully complying with the most up-to-date waste water treatment standards.





**Modernization and Expansion** of the "Czajka" Waste Water Treatment Plant

The first waste water treatment stage will be the mechanical sedimentation - the waste water will be processed through the sedimentation grid to the sand filtration units and later to sedimentation tanks

In the second treatment stage, the waste is directed to the active sedimentation pools where - during the biological treatment phase - nitrogen and phosphorus will be removed. From the pools, the waste water will be directed to the secondary sedimentation tanks where the sediments drop to the bottom of the tanks.

The ELEKTRA VCD heating cables have been installed in all the 20 runner tracks of the secondary sedimentation tanks and 6 primary ones. Their task is to prevent ice and snow deposition on the tanks' edges, where the sediment taking arm moves.

The investment started with the contract signed on the 30th January 2008, and the heating system for the part of the sedimentation tanks was entered into full operation in September 2009, successfully passing the test of the harsh winter conditions in 2009/2010. Additionally, ELEKTRA supplies the pipeline heating systems for this project.

#### **Culture Center** in Shanghai

The ELEKTRA SelfTec®PRO selfrequilating heating cable has been used in the Culture Center at the EXPO 2010 in Shanghai. The system protects a 3 km's long water pipeline against freezing.

This extremely prestigious reference accompanies the offcial launch of the latest ELEKTRA product.



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