D.R. Distribution

The Heating Specialists

IN SLAB FLOOR HEATING

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- Suitable for new buildings & extensions where a new slab is being poured.
- The heating cables are fixed to the reinforcing mesh before the concrete pour & then the integrity of the cable is monitored during the pour.
- A once in a lifetime investment with no recurring maintenance costs.
- Eliminates mould from wet areas.
- Room by room control maximises efficient energy use.
- Normally cold surfaces, become a heat source.
- Benefits for asthma & allergy sufferers.
- No structural modifications, fans, ducting or motors are required & the concrete slab remains the same thickness.
- Very low operating costs

CONTROL

- Every heated area is individually controlled allowing installation in all rooms or as few rooms as required.

VALUE

- Generally in slab heating is connected to low cost off peak tariff power & provides continuous heating at approximately one third of the cost of other methods of heating for the same period of time.
- Off peak storage heating increases the ability of any limited power service to cope with peak time appliance use.
- All heating is already stored which leaves the full capacity of your power supply available for peak time appliances.

CHOOSING THE CORRECT SIZE HEATING UNIT

- The actual floor area to be cabled determines the size of the heating unit.

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CODE	KW	LENGTH	INSTALL AREA M2
ELEC04	0.4	13 M	2.6-3.3 M2
ELEC06	0.6	16 M	3.4-4.7 M2
ELEC09	0.8	24 M	4.8-6.7 M2
ELEC11	1.1	34 M	6.8-8.1 M2
ELEC14	1.4	41 M	8.2-9.1 M2
ELEC15	1.5	46 M	9.2-10.3 M2
ELEC17	1.7	52 M	10.4-12.3 M2
ELEC21	2.1	62 M	12.4-14.7 M2
ELEC24	2.4	74 M	14.8-18.9 M2
ELEC30	3.0	91 M	19.0-20.9 M2
ELEC34	3.4	101 M	21.0-26.0 M2
ELE C44	4.4	132 M	27.0-35 M2
ELEC59	5.9	178 M	36.0-40.0 M2

INSTRUCTIONS FOR CABLE INSTALLATIONS

- All heating elements must be installed in accordance with AS 300 section 4.22.
- Heating elements supplied must not be cut or shortened
- Cables must not cross or touch
- Terminations must be buried in the concrete
- Drawing should be kept showing approximate cable layout with active termination marked.
- All heating elements should be tested prior, during & after installation, this should read infinity on a 1000v megger
- To avoid damage, cables should be covered immediately with concrete.
- Cable is monitored during the pour.
- The heating system must not be operated for at least 4-6 weeks after installation, this allows the slab to cure naturally.
- We recommend all heating elements be protected by a 30ma residual current device.

INSTALLATION SUMMARY FOR SLAB SYSTEMS

- Take the time to either draw out a plan or at the very least, calculate spacing's within the heated area beforehand.
- The layout of the cable should take into account fixed furniture such as benches, toilets, baths etc.. It is vital that the cold tails be installed correctly. They must be no less than 300mm from the edge of the slab, NOT on the wall cavity, cable failure may occur & create a potential fire risk if not adhered to.
- Regardless of the cable protection afforded by the concrete, the element earth connection must be made. This provides additional electrical protection of the cable, in the event that the concrete is damaged, as well as efficiently earthing the steel mesh & minimizing RFI (radio frequency Interference).
- The steel reinforcement MUST NOT be earthed, unless special provisions are made for termination, as corrosion due to electrolysis may occur. This could severely reduce the mechanical strength of the slab.
- DO NOT USE ELECTRICAL TAPE TO FASTEN CABLE TO MESH. Fix the ends only at first, allowing any errors to be more easily corrected if apparent later in the layout
- The cable should be clipped to the top of the steel reinforcement using a specially designed steel clip which should be fitted with a suitable clamping tool, otherwise mechanical damage may occur especially if the clip is tight. The cable is only clipped for support prior to the pouring of the slab. If nylon cable ties are fitted too tight they may cause "hot spotting" which may result in premature failure of the whole element.
- It is recommended that each element be electrically protected with a circuit breaker & not a rewireable fuse, regardless of whether it is being switched directly by a room thermostat or via a contactor.
- The anticipator or temperature compensator MUST NOT be wired in the room thermostat, otherwise the system will cycle & cause premature failure of the load switching device.
- The cable electrical insulation continuity should be tested prior to concreting & should be continually monitored during the pour.
- Any fault should be boxed out & repaired after the pour.

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