Comfortline Ceiling Foil Heating System - Specification.

This section relates to the supply and installation of **Comfortline Ceiling Foil** **Heating** **Systems** for heating and control in domestic, residential, education, community, commercial and industrial applications.

**1. DOCUMENTS.**

1.1 **Product and installation Compliance Documents.**

 Compliance with the following documents is required during the installation, commissioning, and testing of installed **Devi™**  products:

 [NZBC G9](http://www.masterspec.co.nz/redirect.aspx?pl=251)/VM1 Electricity, 1.0 Electrical installations.

 AS/NZS 60335-2.96 Electrical safety.

 IEC 60730-2-9 DEVIreg™ thermostat.

### 1.2 **Manufacturers Documents.**

 **Comfortline** product information, installation instructions and warranty documents are supplied with all products.

 Additional copies of these instructions are available from:

 Web: [www.devi.co.nz](http://www.devi.co.nz)

 Email: info@devi.co.nz

 Telephone: South Island 03 348 0070 or 0800 468 356

 North Island 09 415 7250 or 0800 927 635

1.3 **Warranty –** **Manufacturer/Supplier**.

 The manufacturer’s warranty is:

 Comfortline CFoil Ceiling foil heating film. 10 years.

 DEVI**™** manual thermostats 2 years.

 DEVI**™** programmable thermostats 2 years.

 Warranties must be provided using the manufacturer/supplier standard forms as supplied. Warranties commence from the date of the installation.

 Work undertaken by each subtrade shall be covered by their own warranty.

### **2**. **RELATED WORKS.**

 Electrical specification.

 Mechanical specification.

 Gib/ceiling installer.

**3. CONDITIONS.**

All work and materials must comply with Comfortline installation instructions.

### **4.** **QUALIFICATIONS.**

###  Installation must be undertaken by an electrical or mechanical trades person holding relevant trade certification.

###  Refer section 7.3 for livening.

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## 5. COMFORTLINE™ PRODUCT AND DESIGN INFORMATION.

5.1 Substitutions are not permitted to any Comfortline heaters or associated products, components, or accessories.

5.2 Comfortline radiant ceiling foil systems are European manufacturedproduct and made to stringent quality procedures in ISO9000 registered facility.

5.3 Comfortline Ceiling Foil heating

* is available in 400mm or 600mm wide options to suit ceiling batten spacing.
* has a maximum install loading of 200W/SQM.
* cut to measure as required for project.

5.4 **Foil Heating Options.**

 CFoil 420 200W/SQM @ 70W/linear meter.

 CFoil 620 200W/SQM @ 100W/linear meter.

 (Delete heater models that are not applicable then delete this line).

5.5 **Thermostat.**

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 DEVIreg™ 530  Thermostat, Manual, 15A with floor sensor.

 DEVIreg™ 531 Thermostat, Manual, 15A with air sensor

 DEVIreg™ Touch (White) Thermostat, Programmable, 16A, air and/or floor sensor.

 DEVIreg™ Touch (Black) Thermostat, Programmable, 16A, air and/or floor sensor.

 DEVIreg™ Smart (White) Thermostat, WiFi Programmable, 16A, air and/or

 floor sensor.

 DEVIreg™ Smart (Black) Thermostat, WiFi Programmable, 16A, air and/or

 floor sensor.

 DEVIreg™ Multi 7 Channel distribution board mounted programmable.

 thermostat and sensors, c/w Bacnet interface.

 (Delete thermostat models that are not applicable then delete this line).

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## 6. EXECUTION.

### 6.1 **Confirm Layout.**

 Before commencing work confirm the proposed location of heaters and controls.

### 6.2 **Co-ordinate Services.**

 Co-ordinate and co-operate with other sub-trades to avoid any conflict with the installation of the system.

6.3 **Preliminary Works.**

 Prewire electrical cabling according to the heating design.

### 6.4 **Installation of Comfortline Ceiling Foil System.**

 Installation is to be carried out in accordance to the manufacturers’ installation guide.

 Ceiling Foils are to be fixed to wooden or metal battens per manufacturer’s instructions with the copper bus strips of the foil a minimum of 10mm clear of the battens and to sit flat on the ceiling fabric.

 Foils are to be installed 100mm clear of any ceiling penetrations.

 Interconnection of foils is to be made with approved double insulated cold tails, crimps and safety insulation covers supplied with the ceiling foils.

 All uncrimped copper bus ends are to be insulated with approved tape.

 Install limitation sensor in accordance to supplier instructions.

### 6.5 **Install Thermostat.**

 Install thermostat and connect the limitation sensor for each zone as per design and in accordance with thermostat installation instructions.

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### **7.** **TEST PROCEDURES AND COMMISSIONING.**

7.1 Refer AS/NZS3000 section 8 Verification.

7.2 Complete visual inspection and conductor resistance test prior to livening the circuit. Record the tests in the record panel in the installation manual. The manual is to be given to whomever the electrician is contracted.

7.3 A registered electrician must complete the test result panel and associated Certificate of Compliance.

### **8.** **CONTROLS SETTINGS.**

8.1 Where programmable or intelligent thermostats are installed, the correct day and time must be programmed, and thermostat left in powered off state.

8.2 Manual thermostats to be left set to minimum setting and in off mode.

### **9.** **CLEANING.**

 Check site for safety and remove all surplus materials.