

Solray Natural Convection Trench Heating



Manufactured at our factory in Swansea, our natural convection trench heaters are available in 6 standard models, with the option to fully customise the specification to suit specific project requirements. With no moving parts they are silent and extremely efficient.

Solray Trench Heating is used around the perimeter of the room to provide balanced heat distribution around the areas where most of the heat loss is. It is highly effective where there are large areas of glazing that would otherwise be difficult to heat with conventional heat emitters.

Slotted joining straps allow for an adjustment 0-45mm spacing between pre-punched casing sections. If run lengths change considerably between site measure/manufacture and installation the casing can be easily cut on site and re-drilled to accept the joining strap component.

Levelling feet fit through the base of the casing allowing 0-25mm adjustment. Longer levelling feet are available to suit larger floor voids.

Key features

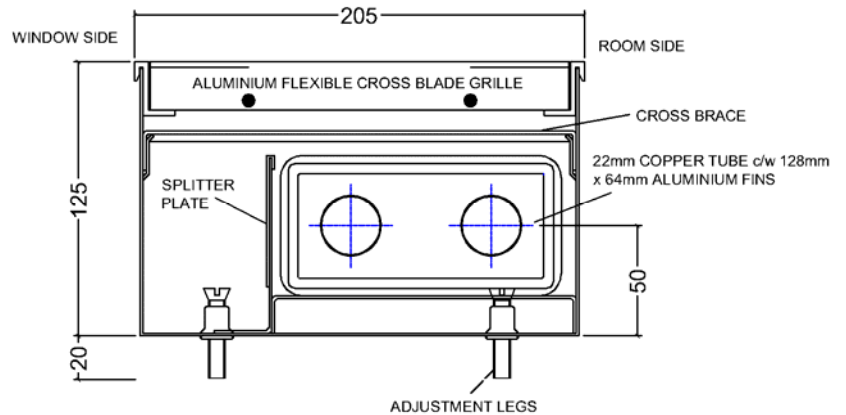
- ✓ Made to order to any length.
- ✓ Trench casing manufactured from 1.2mm zintec sheet powder coated black internally.
- ✓ The heating elements are 15mm or 22mm copper tubes with aluminium fins mechanically locked for excellent heat transfer.
- ✓ Top quality aluminium roll-up grille with class leading strength. Anodised to AA15 in a natural satin finish as standard with a range of other colours available upon request.
- ✓ Grille blades spaced for 60% free area as standard. 30%, 50% ("pencil proof") and 70% free area grilles are also available.
- ✓ The trench casing is fitted with levelling screws to adjust the height as required.
- ✓ Optional kerb casing available for all models where no raised floor is available.



Sol-01

The trench casing is 205mm wide and 125mm deep manufactured from 1.2mm zintec sheet. All internal casings are powder coated black.

The heating element arrangement is twin 22mm diameter copper tubes (end feed only) through 128mm x 64mm aluminium fins, mechanically locked for excellent heat transfer.



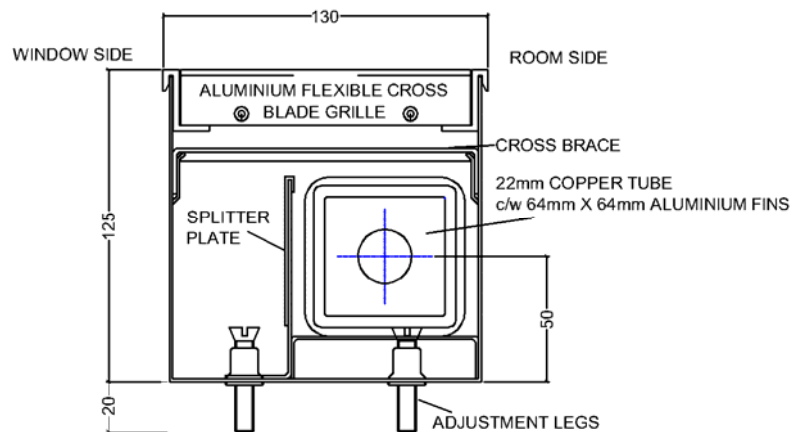
Watts per Metre												
Ambient Temp	18 °C				20 °C				22 °C			
Grille Free Area	30%	50%	60%	70%	30%	50%	60%	70%	30%	50%	60%	70%
Mean Water Temp 80 °C	583	687	738	790	561	661	711	760	540	635	683	731
76.5 °C	545	642	690	738	518	610	656	701	496	584	628	672
70 °C	463	545	587	628	436	513	552	591	420	494	531	568
60 °C	349	411	442	473	327	385	414	443	311	366	393	421
50 °C	234	276	297	317	213	250	269	288	196	231	248	266

Outputs for wider ranges of ambient and MWT available on request

Sol-02

The trench casing is 130mm wide and 125mm deep manufactured from 1.2mm zintec sheet. All internal casings are powder coated black.

The heating element arrangement is a single 22mm diameter copper tube (end feed only) through 64mm x 64mm aluminium fins, mechanically locked for excellent heat transfer.



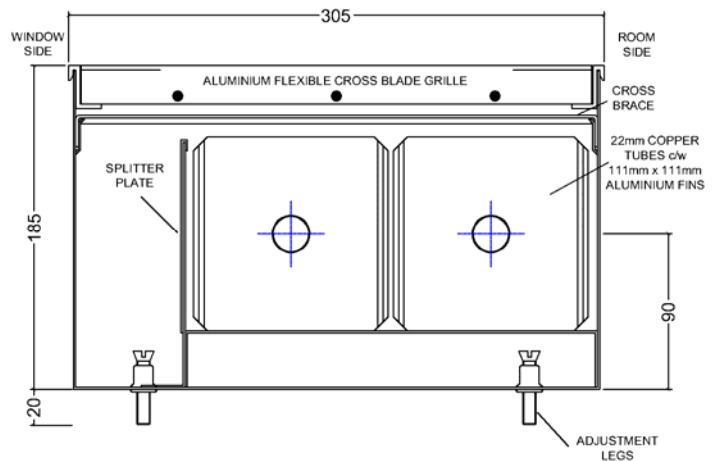
Watts per Metre												
Ambient Temp	18 °C				20 °C				22 °C			
Grille Free Area	30%	50%	60%	70%	30%	50%	60%	70%	30%	50%	60%	70%
Mean Water Temp 80 °C	400	437	460	483	385	421	443	465	370	404	426	447
76.5 °C	374	409	430	452	355	388	409	429	340	372	391	411
70 °C	318	347	366	384	299	327	344	361	288	315	331	348
60 °C	239	261	275	289	224	245	258	271	213	233	245	257
50 °C	161	176	185	194	146	159	168	176	135	147	155	163

Outputs for wider ranges of ambient and MWT available on request

Sol-03

The trench casing is 305mm wide and 185mm deep manufactured from 1.2mm zintec sheet. All internal casings are powder coated black.

The heating element arrangement is twin 22mm diameter copper tubes (end feed only) through two sets of 111mm x 111mm aluminium fins, mechanically locked for excellent heat transfer.



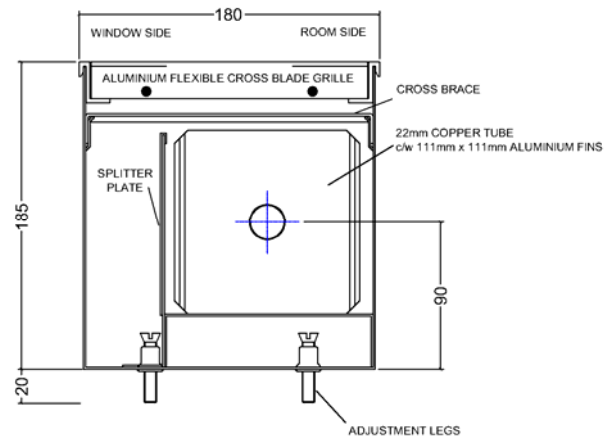
		Watts per Metre											
Ambient Temp		18 °C				20 °C				22 °C			
Grille Free Area		30%	50%	60%	70%	30%	50%	60%	70%	30%	50%	60%	70%
Mean Water Temp	80 °C	859	1124	1263	1401	826	1082	1215	1349	794	1040	1168	1297
	76.5 °C	802	1050	1180	1310	762	998	1121	1244	730	956	1074	1192
	70 °C	682	893	1003	1113	642	840	944	1048	618	809	909	1009
	60 °C	514	672	755	838	481	630	708	786	457	599	673	747
	50 °C	345	452	507	563	313	410	460	511	289	378	425	472

Outputs for wider ranges of ambient and MWT available on request

Sol-04

The trench casing is 180mm wide and 185mm deep manufactured from 1.2mm zintec sheet. All internal casings are powder coated black.

The heating element arrangement is a single 22mm diameter copper tube (end feed only) through 111mm x 111mm aluminium fins, mechanically locked for excellent heat transfer.



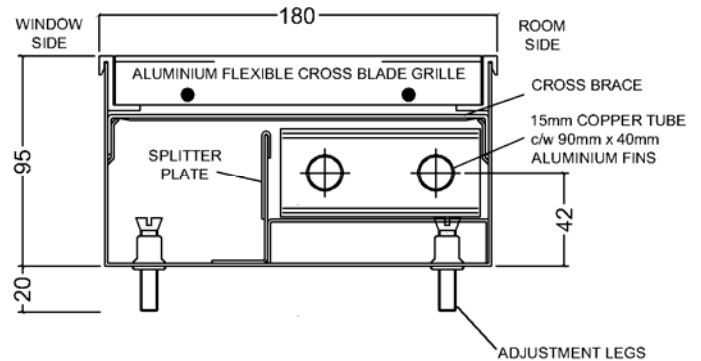
		Watts per Metre											
Ambient Temp		18 °C				20 °C				22 °C			
Grille Free Area		30%	50%	60%	70%	30%	50%	60%	70%	30%	50%	60%	70%
Mean Water Temp	80 °C	693	786	845	896	667	757	814	863	641	727	872	829
	76.5 °C	648	735	790	837	615	698	751	796	589	669	719	762
	70 °C	551	624	672	712	518	588	632	670	499	566	608	645
	60 °C	415	470	506	536	389	441	474	502	369	419	450	477
	50 °C	279	316	340	360	253	287	308	327	233	264	284	301

Outputs for wider ranges of ambient and MWT available on request

Sol-05

The trench casing is 180mm wide and 95mm deep manufactured from 1.2mm zintec sheet. All internal casings are powder coated black.

The heating element arrangement is twin 15mm diameter copper tubes (end feed only) through 90mm x 40mm aluminium fins, mechanically locked for excellent heat transfer.



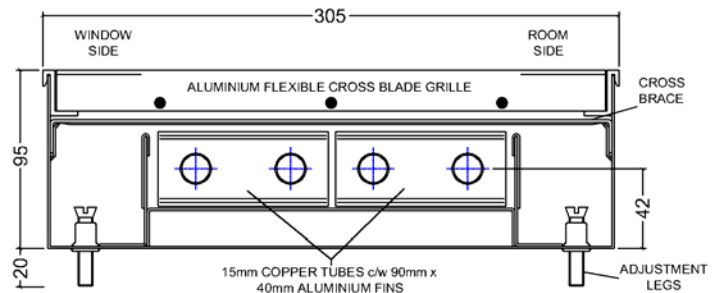
		Watts per Metre		
Ambient Temp		18 °C	20 °C	22 °C
Grille Free Area		60%	60%	60%
Mean Water Temp	80 °C	268	258	248
	76.5 °C	250	238	228
	70 °C	213	200	193
	60 °C	160	150	143
	50 °C	108	98	90

Outputs for wider ranges of ambient and MWT available on request

Sol-06

The trench casing is 305mm wide and 95mm deep manufactured from 1.2mm zintec sheet. All internal casings are powder coated black.

The heating element arrangement is quad 15mm diameter copper tubes (end feed only) through twin 90mm x 40mm aluminium fins, mechanically locked for excellent heat transfer.



		Watts per Metre		
Ambient Temp		18 °C	20 °C	22 °C
Grille Free Area		60%	60%	60%
Mean Water Temp	80 °C	375	361	347
	76.5 °C	350	333	319
	70 °C	298	280	270
	60 °C	224	210	200
	50 °C	151	137	126

Outputs for wider ranges of ambient and MWT available on request