

tibio spread the warmth



This simple yet elegant unit quietly recirculates the expensive wasted heat that gathers at the top of each room and delivers it to where it is needed.

Tibio provides more comfort and can save up to 24% on the cost of heating a room.



Tibio lowers energy consumption, reduces cold draughts and reduces carbon emissions upstream to power stations.

Tibio gives you savings, increased comfort & is environmentally friendly.

Tibio is available in a choice of designs to blend into any decor in the main family room or at the head of the stairs.

- High efficiency – returns upto 52 times running cost in heat recovered using proven principals of destratification
- Simple installation with removable non destructive tabs for easy repositioning

- Options for variable speed, automatic operation by thermostat pre-sets, feature lighting
- Supplied fully assembled ready for installation or DIY self-assembly

- CE compliant. 12 months warranty with high efficiency, low dB, longlife fan assembly. Produced in the UK to ISO 9001 quality standards.
- Provided with appropriate connections for EU and USA power supplies

Using proven principles of destratification used widely in large buildings, airports and sports halls Tibio recirculates over 720* cubic metres of pre-heated air daily from the top of the heat gradient at ceiling level.

In an average lounge room during winter with heating on there will be a temperature difference of up to 10 deg C between the top of a room and floor level (the gradient). 50% of a family's heating budget can be going to heat the air at the ceiling. This reservoir of costly heated air is waste.

Tibio delivers this heat to the level a family need it effectively creating a 'free' source of heat for a tiny running cost.

The table below shows the coefficients of Tibio across typical gradients from 7degC to 10degC. and the value of the potential weekly heat recovered.

Tibio Technical Overview

Tibio diameter	0.125	m				
Tibio area	0.012	m ²				
Air velocity through Tibio	0.94	m/s				
Flow rate through Tibio	60.00	m ³ /hr				
Density of air	1.29	kg/m ³	Taken as average - domestic conditions			
Mass flow rate per hour	77.53	kg/h				
Specific heat capacity air	1.012	J/g/K	Taken as average - domestic conditions			
Heat energy transportable	78462	J/K				
Fan supply power	4	W				
Comparison - Gas cost	0.065	£ Kwatt	Unit cost of heat in the recovered air -			
Comparison - Electric cost	0.1347	£ KWatt	Average UK prices June 2014			
C deg difference ceiling to mid room (Gradient)	1.0		7.0	8.0	9.0	10.0
Energy transferred - joules	78462		549237	627699	706161	784624
Energy transferred - watts per hour	21.8		152.6	174.4	196.2	218.0
Coefficient of performance	5.4		38.1	43.6	49.0	54.5
Cost per week of use, 12 hours daily @ 336 w @ £0.1347 per Kwatt	£0.045		£0.045	£0.045	£0.045	£0.045
Value of heat recovered per week*	£0.25		£1.73	£1.97	£2.22	£2.47

Calculations verified by:

BMEEnergy Management Consultants Ltd

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*Based on a 12 hour day. Note: The returns cannot be assured for all circumstances as living conditions vary between dwellings and families



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