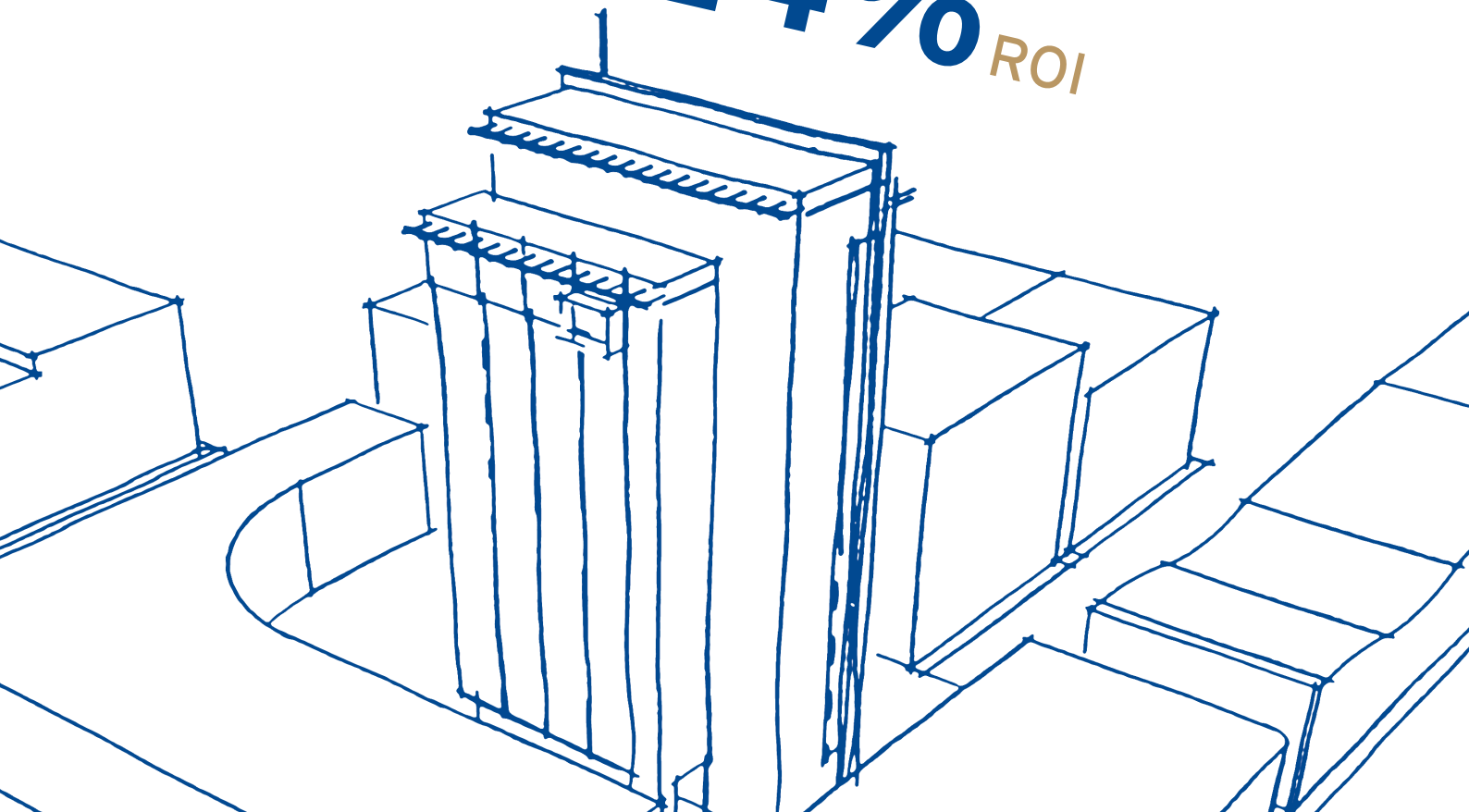




The Real Value of Space

A SUMMARY OF THE IMPACT OF DIFFERING WALL INSULATION SPECIFICATIONS ON THE ROI ASSOCIATED WITH INTERNAL FLOOR AREA IN NEW NON-DOMESTIC BUILDINGS WITH A VENTILATED RAINSCREEN WARM WALL CONSTRUCTION

1324% ROI



Kingspan[®]

*Low Energy –
Low Carbon Buildings*

The Real Value of Space - Rainscreen Insulation

Introduction

“A lower thermal conductivity can result in thinner insulation. A thinner insulation can result in thinner external wall construction. A thinner external wall construction can result in greater internal floor area. A greater internal floor area can result in a greater Return on Investment (ROI)”.

The usable space within a building is a fundamental metric in understanding the valuation, thus the investment potential, of real estate. Property with greater internal floor area commands a higher rental return in addition to a higher overall financial value and could, therefore, give rise to a greater ROI.

With the aim of quantifying the financial benefits that result from insulating the external walls of new non-domestic buildings with *Kingspan Kooltherm* wall insulation solutions, Kingspan Insulation commissioned Sweett Group to investigate the ‘Real Value of Space’.

This summary looks at the financial value of the additional internal floor area gained, without increasing the overall footprint, in buildings with a ventilated rainscreen warm wall construction through the use of *Kingspan Kooltherm K15 Rainscreen Board*.

Analysis

The analysis considered a range of building characteristics (e.g. size and shape) and commercial variables (e.g. geographical location, rental value and material cost), that were representative of modern day non-domestic building stock across Great Britain. These were used to create a model from which a database of 7290 building instances was generated. The database buildings were subsequently analysed to identify where the additional space, obtained via the use of *Kingspan Kooltherm K15 Rainscreen Board*, offers the most financial benefit.

To establish the extent of the financial value of the internal space gains, two differing insulation specifications, required to achieve the same specified thermal performance standard, were compared. The construction width and cost for both scenarios were used as direct inputs into the model.

To correlate the database findings with real buildings and real cost information, the same method of calculation as that used in the analysis of the database buildings was later applied to nine real case study buildings from Southampton to Glasgow.

Findings

The overall width of the wall build-up incorporating *Kingspan Kooltherm K15 Rainscreen Board* is 80 mm thinner than that incorporating glass mineral fibre and despite the requirement for a CapEx uplift, the specification of *Kingspan Kooltherm K15 Rainscreen Board* can still give rise to an overwhelming ROI.

For those database buildings attracting rental incomes between £175/sq.m (£16.25/sq.ft) and £750/sq.m (£69.68/sq.ft) in locations with yields between 2.5 and 12.5%, the ROI is 100% or greater – the greatest of which being 4250% at 2.5% yield.

For all nine real case study buildings, the ROI is positive – the greatest of which being 1324% for a 14 storey office tower in central London with a lettable floor area of 15650 sq.m (168457 sq.ft). See Table 1 for details.

Conclusion

Kingspan Kooltherm K15 Rainscreen Board should be considered the insulation of choice for new non-domestic buildings with a ventilated rainscreen warm wall construction, where ROI is a key requirement for property developers, investors and owners. For the full story, go to:

www.kingspaninsulation.co.uk/RealValueofSpace.

Location	Building Type	Rental Value per Annum		Size		Yield (%)	ROI (%)
		£/sq.m	£/sq.ft	sq.m	sq.ft		
Glasgow	Retail	159	14.77	5500	59202	9.0	282
Edinburgh	Business Centre	106	9.84	960	10333	7.5	257
Manchester	Technology Park / Centre	237	22.02	6200	66736	6.0	359
Milton Keynes	Business Park	154	14.31	10300	110868	5.5	353
Peterborough	Laboratory / Small Office	142	13.19	610	6565	7.0	242
London	Office Tower	554	51.47	15650	168457	4.5	1324
Cardiff	Industrial / Office	61	5.67	35800	385348	8.5	32
Bristol	Office	289	26.85	29600	318612	6.5	578
Southampton	Business Park / Office	184	17.09	16700	179757	7.0	418

Table 1: ROI for Case Study Buildings to which the *Kingspan Kooltherm K15 Rainscreen Board* Wall Build-up was applied.



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