HUSH ACOUSTICS

CONSUMER PRODUCTS







ABOUT US

Hush Acoustics have specialised in solving acoustic issues across the United Kingdom since 1984. We specialise in all market sectors for reducing the transmission of sound but are renowned for giving expert advice and providing effective soundproofing products and systems to the consumer, domestic and self-build market.

Our range of products and systems are designed to comply with all relevant UK Building Regulations to ensure you are meeting or surpassing the minimum requirements and full filling your expectations for the reduction of sound transmission within your property. Our products and systems are easy to install with complete step-by-step instructions and we do offer a designated technical team who are on hand to answer any soundproofing enquiry.

Hush has been involved in the design and manufacture of sound reducing products for over 30 years and we are one of the longest established acoustic product specialists in the UK. We can work with you to establish exactly what products are needed for your home and will help you every step of the way to ensure they are fitted correctly with the minimum amount of disruption.

CONTACT ONE OF OUR EXPERIENCED TEAM

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SOUNDPROOFING YOUR HOME

Controlling volume levels of everyday life is difficult. Noisy neighbours, footstep noises, loud televisions, high traffic levels outside, musical instruments and many more factors can have a significant and detrimental impact on your precious time at home.

All UK Governments recognise that poor noise levels within a property is beginning to effect the occupants everyday life, stress levels and general health conditions. Due to these findings, there is guidance within all UK Building Regulations Documents, Approved Document E (England & Wales), Section 5 of the Scottish Building Standards (Scotland) and Approved Part G (Northern Ireland) recarding the transmission of sound.

These documents cover both separating floor and wall standards for material change of use and new build developments but also set target internal noise levels to be achieved to prevent peoples own noise levels causing issues for anyone who is sharing the property.

One thing to point out is sound is a subjective problem. Something that effects one person may not effect another or certain noise levels will be more disruptive to a person than others. The documents mentioned only offer guidance for a minimum build standard and because noise is such an issue for the consumer, domestic and self build market, occupiers of residential units may need to look to achieve higher than any minimum requirements mentioned in the governing legislation to reduce their problem.

The good news is that soundproofing your home is affordable, achievable and if done right, will give you a better standard of living and in time add value to your home.

Many acoustic products can only require a low to medium DIY competency to install. The most important factor when soundproofing your home is to ensure the right products and systems are used for your particular need. For example, the right acoustic floor underlay would need to be selected if you are experiencing a footfall impact noise issue from above.



DIAGNOSING NOISE PROBLEMS

Within your home, noise is transmitted by airborne and impact sound sources. Airborne sound sources include speech, TV noise, music and other general noises. Impact sounds are sudden sound sources like footstep noise. These sound sources are transmitted directly and indirectly though a property.

Direct sound transmission is when sound simply travels directly through a construction to get to the other side. For example, noise will travel directly though a connecting wall between two residential dwellings or footstep noise will travel directly from above through the floor. Direct sound is the easier of the two to reduce, as you just need to treat the problem area. Indirect sound transmission is when sound travels through a construction by any indirect means. For example, instead of sound travelling directly though the wall that separates two residential units it will travel through the ceiling, the floor and the connected walls at the side. Impact sound will travel down the walls as well as through the floor itself. The noise travelling through the walls from above will be classed as indirect sound travel. Both airborne and impact noise will travel directly and indirectly though a property. To treat a problem correctly both the direct and indirect sound paths will need to be reduced. (Just for reference..... indirect sound is more commonly referred to as flanking sound in the industry).

It is crucial to determine whether you are experiencing an airborne or an impact noise issue within your property and then as to whether it is travelling directly or indirectly. Once these things are determined we will be able to give quidance on the best way to reduce or solve the problem.

We are finding that the consumer sector is starting to use acoustic testing to determine the sound source

levels within an existing residential block and from these tests results we can create a detailed solution to the problem. Acoustic testing may also be required as part of a change in a lease agreement. For example, changing a floor finish in an existing block of flats from a carpet to a timber floor could break the terms of a lease so for this to happen it will need to be proved to the leaseholder

that changing the floor finish will not have a detrimental effect on the neighbours below. The only way to prove this is by acoustic testing.

Hush Acoustics can provide UKAS accredited Sound Testing within the testing guidelines of all UK Building Regulations. Our qualified acoustic consultants are able to provide a range of sound testing and consultancy services.



HOW TO DEAL WITH NOISY NEIGHBOURS

We have all had to deal with noisy neighbours at some point. Paper-thin walls combined with a neighbour that likes the occasional party or footstep noises from above becoming an issue because the floor construction is performing no better than an internal floor of a house.

You can't choose your neighbours, but you can certainly reduce nuisance noise levels you hear from them.

Hush Acoustics have developed a range of soundproofing products and systems, which will reduce the level of nuisance noises from your neighbours. Our technical experts can advise on the most appropriate wall, ceiling or floor acoustic solution.

HD1055 Masonry Wall With Stud Lining WE LIVE IN A BLOCK OF FLATS AND HAVE TWO LOTS OF NOISY NEIGHBOURS. THE COUPLE UPSTAIRS HAVE HARD FLOORING THROUGHOUT AND EVERY TIME THEY WALK AROUND IN HEELS / SHOES OR MOVE FURNITURE AROUND IT IS AMPLIFIED THROUGH OUR FLAT. ALSO, THE COUPLE NEXT DOOR HAVE AN ACTIVE SOCIAL LIFE. THEY REGULARLY HAVE FRIENDS AROUND AND OFTEN HAVE GATHERINGS WHICH GO ON UNTIL THE EARLY HOURS IN THE MORNING. CAN ANYTHING BE DONE TO HELP OUR SITUATION?

YES IT CAN! WE WOULD TREAT EACH NOISE PROBLEM SEPARATELY. SO THE NOISE PROBLEMS FROM THE COUPLE UPSTAIRS WOULD BE TREATED WITH AN ACOUSTIC CEILING SOLUTION (see page 8 for more details), AND THE NOISE ISSUES FROM YOUR ADJOINING NEIGHBOURS WOULD BE TREATED USING AN ACOUSTIC WALL SYSTEM OR A WALL LINING SYSTEM (see page 9 for more details).

WE RECOMMEND:

Ceilings - Hush MF Ceiling, Hush Resilient Bar, Hush Deep Bar, Hush Bar Plus or the Hush Resilient Clip and Bar System

Walls - The Hush Wall Lining System (HD0141), The Hush Wall System (HD1040), The Hush Masonry Wall with Stud Lining System (HD1055).



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MORE THAN JUST NOISY NEIGHBOURS......

We deal with many self builders, property developers and consumers that are building a new house, converting a property into flats or doing a complete refurbishment. A few key points are listed here for these situations.

NEW BUILD AND CONVERSION/CHANGE OF USE DEVELOPMENT

Depending in which part of the UK you are in will depend on the legislation you need to meet for New Build or Conversion/Change of Use Development. If you are in England & Wales you will need to comply with Document E, if you are in Scotland then you will need to comply with Section 5 of the Scottish Building Standards and if you are in Northern Ireland then you will need to comply with Part G.

These documents list the minimum requirements for sound transmission through properties. This includes separating standards for multi occupancy (connected separate dwellings) and internal noise levels of your own property. More information about the actual figures you

need to achieve can be found on the Hush Website www.hushacoustics.co.uk/technical-resources/uk-building-regulations or can be discussed wit the Hush Technical Team on 0151 933 2026.

However, we are finding more and more that the consumer, self-builder or property developer is not satisfied with the minimum standards detailed in the regulations and that people want a better standard of living. Depending on your circumstances or how susceptible to noise issues you are will depend on the level of performance you require. Hush can offer quidance on improving on these minimum standards.

REFURBISHMENT

The majority of acoustic work we carry out in the consumer, self-build or property developer market is when clients are refurbishing their own property. You will not find guidance within the governing documents (already mentioned) for refurbishment projects. If it is an existing residential unit and you are simply refurbishing it then there isn't a minimum level to achieve. This doesn't mean that nothing has to be done, if anything you will need to look at acoustic products and materials in more detail as you are likely to create an acoustic problem that wasn't there previously.

The most common issues that occur in refurbishment projects are changing layouts or changing floor finishes. Removing carpets and putting a timber floor down is the most common issue and it is imperative that the correct acoustic materials are used to prevent this causing an







HOW TO SOUNDPROOF FLOORS

If you are considering soundproofing your floor it is important to think about what you want to achieve. Do you want to stop nuisance airborne noises coming up from the property below or are you trying to reduce footfall impact noises from your property to the neighbours below?

The best way to treat airborne noise is to treat the ceiling of the property below. This is not always possible depending on how willing the neighbour is to help stop the problem. A correct ceiling detail will be the most effective (see page 8) but if you are only able to treat the floor from above the structure (your floor) you need to look at adding a degree of absorption within the construction and some high mass acoustic floor products. Hush Slab 100 placed between the joists and a high mass flooring such as Hush Cem Panel 28 or

Hush Mat 15 will be needed.

To reduce impact noises (e.g. footsteps) being transmitted down to the property below we recommend installing acoustic floating flooring or overlay acoustic matting. These are easy to install and you can lay the boards directly over joists or as an overlay over timber or concrete floor structures (when correctly specified).

The things that will determine what floor product is to be used 1) the performance levels you are looking to achieve and 2) what the final floor finish is going to be and how it will be laid over the top of the chosen acoustic floor system. For example, Hush Mat 15 can be installed

directly under carpet or engineered timber floors.

Solid timber flooring will need to be installed

over a timber faced acoustic overlay board

and a tiled floor finish can be laid over a timber or cement particle acoustic flooring.

For more information on selecting the correct acoustic flooring then please contact the Hush Technical Team on o1519332026.

HD1048 Hush Mat 15 MF System

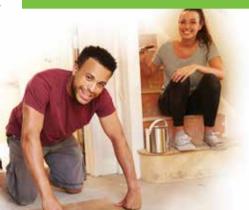
WE RECOMMEND:

Hush Acoustic Ceiling Products (see page 8 for more details)

Hush Slab 100, Hush Panel 28, Hush Panel 17

Hush Ply 28, Hush Mat 15, Hush Cem Panel 28

(Other products available, please see the Hush website for more details or speak to the Hush Technical Team on 01519332026).





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HOW TO SOUNDPROOF CEILINGS

If you are experiencing both airborne and impact noise issues from a neighbour above then you may need to look at treating the ceiling of your property.

By creating a new ceiling you decouple the plasterboard lining from the structure and remove the direct sound paths that are transmitting the sound. Installing a metal frame suspended ceiling, a resilient bar solution or an independent timber frame are a few ways of creating an acoustic ceiling.

It is important that all acoustic materials are used to form the ceiling treatment. This can include the Hush

Slab 100, Hush Multi Panel, Hush MF Ceilings, dense acoustic plasterboards or one of the Hush Resilient Bar Systems.

To ensure the correct system is to be used for your development please call the Hush Technical Team on o1519332026.

> Hush Metal Frame Ceiling System



RELATED PRODUCTS

Hush MF Suspended Ceiling System Hush Slab 100 Sound Absorber Hush Multi Panel Hush Bar Resilient Bars
Hush Bar Deep Resilient Bars
Hush Bar Plus Resilient Bar System
Hush Resilient Clin and Bar System





HOW TO SOUNDPROOF WALLS

There are several ways of treating acoustic problems through separating walls from a neighbours property or to prevent noise transmitting through an internal wall of your own property.

The best way of treating acoustic problems through walls is to create a degree of separation. Independent linings such as Hush System HD1055, resilient bar solutions like the Hush Systems HD1040 or HD1041 or a twin stud type of system such as Hush System HD1052 and HD1054 will prevent the transmission of sound. Creating separation within the wall construction will break any direct sound paths which will in turn improve the acoustic performance levels.

All the information regarding these systems can be found on the Hush Website www.hushacoustics.co.uk.

HD1040 HUSH WALL SYSTEM

RELATED PRODUCTS

Hush Resilient Bars, Hush Multi Panel Hush Wall Board, Hush Slab Sound Absorbei Independent Stud Work

RELATED SYSTEMS

Hush Wall System HD1040 Hush Wall Lining System HD1041 Hush Twin Metal Stud Wall HD1052 Hush Single Stud Wall HD1053 Hush Double Timber Wall HD1054 Hush Masonry Wall Lining HD1055

PRODUCTS



HOW TO CHOOSE THE RIGHT ACOUSTIC PRODUCT FOR YOUR HOME

As mentioned throughout this brochure, when soundproofing your home the most important factor to consider is to ensure the right acoustic products are used for the right application. This may sound like an obvious thing to say but different systems and different products do different things, so you must select the right product for the problem you are encountering. For example the correct acoustic floor product must be selected to reduce impact noises through the floor and the correct wall system must be selected to reduce airborne noise from the neighbours property next door.



HERE IS OUR BRIEF GUIDE TO HELP YOU CHOOSE THE RIGHT PRODUCT

STEP 1 – Locate the source of the nuisance noises - are they coming through walls, ceilings or floors?

STEP 3 – Decide on the level of soundproofing you require. For example, there are simple solutions like laying acoustic floor matting, or more complex solutions like installing whole acoustic flooring systems.

STEP 2 – What is the level of noise / how loud is the noise source? You can give an estimate of how bad the problem is but you may also wish to carry out an acoustic test to get the exact noise level (you will need access to both properties to carry out a soundtest).

STEP 4 – Choose the right high quality products to suit what you are looking to achieve on site. This is important whether you are looking to meet a minimum requirement of the Building Regulations or if you are simply looking to reduce the noise issues to the level you expect. Good acoustics will also add value to your home.

Hush Acoustics are able to offer you comprehensive advice and technical information and can work with you to establish exactly what products you need for your home. Our friendly flooring experts are only at the other end of the phone and are happy to help no matter how large or small your soundproofing requirement is.





HUSH MAT 15 CASE STUDY

A HUSH CASE STUDY TO SHOW HOW TO ACOUSTICALLY TREAT A TIMBER FLOOR WHEN BEING LAID AFTER REMOVING A CARPET.

Hush Acoustics were asked to assist on the acoustic impact issues of replacing a carpet with a timber floor finish. The owner of the property in Kensington, London, needed to prove that she wasn't impacting on her neighbour below by removing the carpet and installing a engineered timber floor. The occupier of the residential unit had a term in the lease that dictated that a change in floor finish is not permitted due to potential sound transmission problems to connected properties. The change in floor finish was accepted when a suitable acoustic resilient layer with added mass and resilience was introduced in line with Building Regulations: Approved Document E: 2003 to reduce sound transmission typically associated with timber floors.

Hush Mat 15 was introduced to decouple the hard wood floor from the existing floor structure.

Floor Construction: Hardwood floor finish 15mm, Hush Mat 15 acoustic underlay, existing timber structural deck and existing ceiling.

The test data results show the impact performance improvement before and after the introduction of hard wood floor and acoustic layer. An increase in Airborne Performance was also noted.

FAST FACTS			
CLIENT:	Block of apartments in Kensington	REGION:	South England
DURATION:	The total refurbishment project from start to finish lasted approx. 4 months.	SECTOR:	Residential
LOCATION:	Kensington, London	PRODUCTS USED	Hush Mat 15

ACOUSTIC ACHIEVEMENTS

An improvement in acoustic performance was achieved by introducing the Hush Mat 15. The before and after test results shown in this case study detail the improvement in acoustic performance achieved by using the Hush Mat 15 under the engineered floor.

COMMON QUESTIONS WE GET ASKED

- I AM RELATIVELY NEW TO DIY AND WOULD CONSIDER MYSELF FAIRLY COMPETENT, BUT WOULDN'T CLASS MYSELF AS AN EXPERT.

 CAN I FIT SOUNDPROOFING PRODUCTS MYSELF?
- A: YES IT IS POSSIBLE TO SOUNDPROOF YOUR HOME YOURSELF. A LOT OF ACOUSTIC PRODUCTS ONLY REQUIRE A LOW TO MEDIUM DIY COMPETENCY. HUSH ACOUSTICS PROVIDE INSTALLATION GUIDELINES FOR EVERY PRODUCT AS WELL AS A LIBRARY OF VIDEOS TO HELP. FOR MORE COMPLEX ACOUSTIC SYSTEMS, IT MAY BE BENEFICIAL TO GET SOME ASSISTANCE. WE CAN ADVISE YOU ON THIS.
 - I LIVE IN A EXISTING FLAT AND WOULD LIKE CHANGE THE FLOOR FINISH TO SOMETHING MORE MODERN. I DON'T WANT TO CAUSE AN FOOTFALL NOISE ISSUE FOR MY NEIGHBOURS BELOW. CAN YOU HELP?"
- YES WE HAVE A RANGE OF ACOUSTIC FLOOR PRODUCTS THAT ARE ALL DESIGNED TO REDUCE IMPACT NOISE. DEPENDING ON THE FLOOR FINISH AND THE LEVEL OF IMPACT NOISE YOU ARE LOOKING TO REDUCE WILL DEPEND ON THE EXTENT OF THE SOLUTION. THE MOST COMMONLY USED PRODUCT TO ISOLATE A TIMBER FLOOR FROM IMPACT NOISE IS OUR HUSH MAT 15.

CALL ONE OF OUR TEAM TODAY ON 0151 933 2026 FOR MORE INFORMATION OR VISIT US ONLINE

www.hushacoustics.co.uk

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