



In the old properties chimneys with age if not maintained regularly become an unnecessary cost and possibly causing damp to penetrate into the house. Moreover, there is also the issue of the space taken up by the chimney breast, and a chimney removal is the excellent option to free up the area. The removal of a chimney or its parts are not that straightforward and requires the careful planning. Here is the insight into the subject.

The internal chimney might be removed either on the ground floor or the first floor without the need to remove the external stack, alter the roof or external appearance and character of the building. A chimney breast is brickwork which allows the chimney rises through the property and usually it starts at the ground floor. With semi-detached and terrace properties, chimney breasts are often built 'back to back' between neighbours. Removing only the section of the chimney like the chimney breast requires the additional support. Unless the whole chimney, from the fireplace to the roof stack is going to be removed, suitable support beams will need to be incorporated to support any masonry above to avoid structural distress or damage or even the collapse of the building.

Depending on the building layout it is possible

to remove the chimney breast either from outside or inside. It might be required to relay the existing electrical cables, pipes or old heating appliances. If the upper parts of the chimney will stay, the structure has to be supported with the steel beams. Such steel support for a chimney breast lies between remaining structural walls or across the loft hatch. The chimney stack should be taken down with the proper support until the permanent structure will be created. The damp prevention is applied, and all voids have to be filled. If the removal of the chimney breast requires the additional support from the party wall, it is essential to involve the structural engineer to design the structure and calculate steel sizes.

The engineer will assess the existing structure, establish the method of work and supports

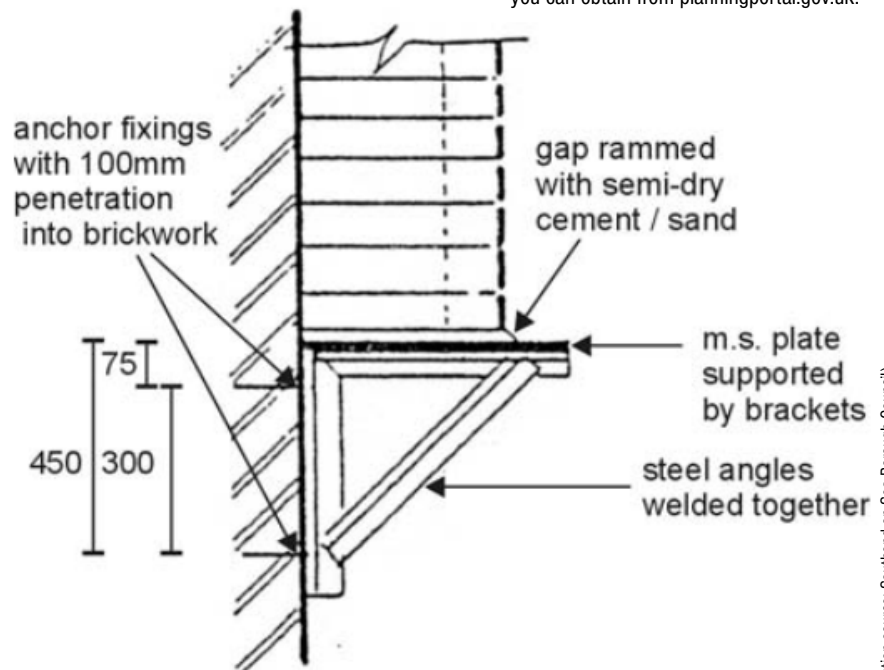


required. The method of work and all designs will need to be submitted to the local building control office for approval before any work commencing. In a scenario when the chimney breast is on a party wall, the Party Wall Act applies and neighbour will be required to give the consent. In such cases, the building control officers supervise work and certify it. It is necessary to check neighbours wall and chimney to see if vibrations can cause debris to fall. The additional protection and insurance might be required. Steel support for a chimney breast between remaining structural walls or across the loft hatch. Where a chimney stack on an external wall is partly removed (often in the terrace houses) the chimney stack has to be of no more than 1 metre above the highest point of the where the stack emerges from the roof.

Constructing and fixing a supporting bracket

Where a stack forms a buttress, the wall must be checked for stability by a structural engineer. The supporting bracket should be made of 50mm x 50mm angles in 5mm or 6mm steel. The edge of the support should be 450 with all the joints welded together with 5mm fillet weld. The brackets should be at 600mm centres and no more than 300mm from the vertical edge of the chimney stack. Over the top of the bracket, there should be a 6mm thick steel plate. All the steel should be given one coat of protective paint. The brackets should be fixed to brickwork in excellent condition. Any brickwork or mortar that is not in good condition should be rebuilt. Where a chimney stack on an external wall

is partly removed, say on the end house of a terrace, the chimney stack should be reduced to be no more than 1 metre above the highest point of the where the stack emerges from the roof. All the steel should be given one coat of protective paint. The holes in the angles should be 12mm in diameter and the anchor fixing should be a 10mm diameter Rawlbolt or similar and should go into the brickwork at least 100mm (see drawing).



If any unused chimney breast is retained, it will need to be ventilated at both the top and bottom. Any moisture in an unventilated wall or chimney will interact with the soot remaining in the used chimney and can cause staining. There should be a 25mm gap between the steel plate and the underside of the brickwork. This gap should be rammed full with semi-dry sand/cement (1:3 mix), and the chimney made good and re-pointed as necessary (Extract from advice by Southend on Sea Borough Council).

When all the demolition and structural works are finished, there is time for final decorating. The approximate cost of removing is of approximate £3500 + VAT plus a charge of external finish depending on the clients choice.

Regulations that apply to the chimney breast removal involve:

- Notice to the local authority and compliance with the Building Regulations. Building Regulations ensure structural strength, fire safety, sound insulation, maintenance of any neighbour's chimney, damp prevention, ventilation to rooms.
- The cost of the approved inspector is approximately £200-£300 + VAT
- Planning permission in case of the listed building
- Survey for Party Wall Act range between £700-£800 + VAT

For more information on chimney removal you can obtain from planningportal.gov.uk.