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(54) **WALL PROTECTOR**

(57) A wall protector 10 is provided to prevent building materials from being splashed backed onto a wall 4 from an adjacent surface 2 on which a person can stand. The wall protector 10 is provided as a barrier having a first portion II arranged to engage with the adjacent surface and a second portion 12 to contact the wall thereby providing an upwardly extending barrier to shield the wall against building material that lands on the adjacent surface from splashing back onto the wall or from falling through a gap between the adjacent surface and the wall.

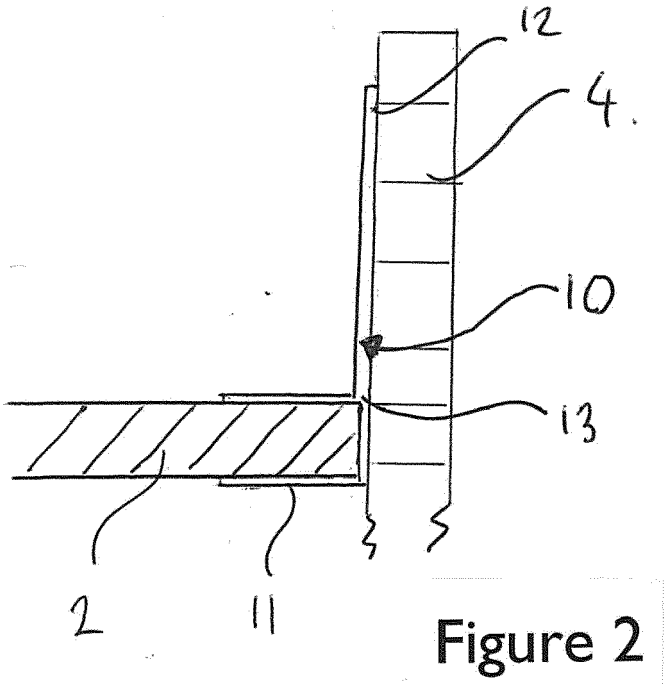

Figure 2

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Description

Field of the Invention

[0001] The present invention relates to a wall protector and in particular but not exclusively to a wall protector to prevent the splash-back of mortar against a wall against which the wall protector is placed.

Background of the Invention

[0002] When constructing a building scaffolding is built up around the building to allow builders to work at increased elevations. Builders lay down mortar to increase brick or block courses and it is inevitable that as the mortar is laid on a course of bricks or blocks and a further course is laid on the mortar that some mortar falls down from the surface on which it is laid and this usually falls onto the scaffolding planks that the builder is standing on. And the subsequent scaffold lifts below further down the building through the gap between the wall and the edged of the scaffold. This has the result that as the mortar hits the plank it causes splash-back against the wall that the builder is working on and the subsequent scaffold lifts below, with the result that the wall can become speckled with mortar which is unsightly. On high storey buildings the mortar staining is compounded and the build-up of the excess mortar droppings over a period of time makes cleaning and removal time consuming and can prolong the scaffold removal. The wall then has to be washed down to remove the mortar which may damage the wall surface if wet mortar comes into contact with the washing fluid. Also if the mortar has dried onto the wall surface, steam cleaners and jet washers which are hard to manhandle without forklifts and cranes plus, cleaning fluids may have to be used which add to building expenses and they may also damage surfaces if not used at the correct concentration as often acid based material are used to remove mortar. These hydrochloric acids are dangerous to the environment and can cause breathing and respiratory difficulties of the operatives.

[0003] Sometimes builders use sheeting to prevent extraneous mortar from coming into contact with a wall but these can easily become dislodged and often get in the way or if they do fall down onto a scaffolding plank can become a trip hazard.

[0004] The present invention seeks to overcome problems associated with the prior art by providing a wall protector that can be easily attached to scaffolding boards, including the non-removable scaffold boards that are clipped in place to meet Health and Safety legislation. The wall protector may be used to prevent splash-back of mortar, render or even paint on a wall that is being constructed

Summary of the Invention

[0005] According to a first aspect of the invention there is provided a wall protector to prevent building materials from being splashed back onto a wall from an adjacent surface on which a person can stand, and/or subsequent fully boarded lifts below, the said wall protector being provided as a barrier having a first portion arranged to engage with the adjacent surface and a second portion to contact the wall thereby providing an upwardly extending barrier to shield the wall against building material that lands on the adjacent surface from splashing back onto the wall and/or from falling through a gap between the adjacent surface and the wall.

[0006] It is envisaged that the wall protector can be integrally formed with the adjacent surface.

[0007] As an alternative the wall protector has attachment members to allow said wall protector to be attached to the adjacent surface.

[0008] The wall may be, for example, a brick- or blockwork face.

[0009] It is envisaged that the adjacent surface is a scaffold board and the wall protector is attachable to the end of a scaffold board that abuts against the wall thereby providing a screen that bridges any gaps between the end of scaffold board and the wall.

[0010] It is envisaged that the wall protector is releasably attachable to the adjacent surface.

[0011] Preferably the wall protector has a channel that is shaped and dimensioned to receive the adjacent surface.

[0012] It is envisaged that the wall protector is formed of an upright barrier and a shoe that can be fitted over the end of the adjacent surface to hold the wall protector in position. By forming a connector part as a channel/shoe or the like into which a board fits a degree of tolerance can be built in to allow different gaps to be accommodated between a board and a wall, and/or to allow movement in use i.e. the screen/shield may be relatively movable (transversely and/or longitudinally) with respect to a board during and/or after fitting.

[0013] Preferably the wall protector is formed of a polymer material.

[0014] The polymer material can be a thermoplastic or a thermoset material or indeed a combination of the two, for example a laminate may be formed. This laminate may include other materials, such as flame retardants.

[0015] It is envisaged that the wall protector is resiliently deformable.

[0016] Preferably the wall protector has a curved surface extending between the adjacent surface and towards the wall.

[0017] It is preferred that the wall protector is resiliently biased to extend from the adjacent surface towards the wall.

[0018] It is envisaged that the wall protector is used to prevent splash-back of any building material which includes mortar, render, paint or varnish from coming into contact with a wall or an individual that may be in proximity to the wall or indeed underneath scaffolding that another individual is working on.

[0019] A further aspect provides a device for preventing mortar staining, the device comprising a screen portion which, in use, extends against a workface to prevent mortar splashing onto the workface.

[0020] A further aspect provides a mortar rash prevention device comprising a screen attached or attachable to a scaffold board and locatable adjacent a workface to prevent mortar landing on scaffolding from splashing back onto the workface and/or from falling through a gap between the adjacent surface and the wall and/or from falling through onto subsequent lower scaffold lifts.

[0021] The device may be attachable to the inside board of scaffolding/staging.

[0022] The device may be elongate.

[0023] The screen may be generally laminar.

[0024] The screen may be in contact with the workface in use. In some embodiments at least part of the screen may be flexible and/or bent towards the wall, or otherwise formed so that it is "pressed" against the wall in use.

[0025] The device may comprise a channel into which a scaffold board is receivable.

[0026] According to another aspect of the invention there is provided a method of protecting a wall or workforce from coming into contact with building materials by attaching wall protector according to any preceding claim and attaching the first portion of the barrier to a surface that is adjacent to a wall and contacting the second portion with the wall to provide an upwardly extending barrier to shield the wall against building material that lands on the adjacent surface from splashing back onto the wall or from falling through a gap between the adjacent surface and the wall.

[0027] According to yet a further aspect of the invention there is provided a scaffolding system including a wall protector as previously described.

[0028] Different aspects and embodiments of the invention may be used separately or together.

[0029] Further particular and preferred aspects of the present invention are set out in the accompanying independent and dependent claims. Features of the dependent claims may be combined with the features of the independent claims as appropriate, and in combination other than those explicitly set out in the claims.

Description of the Figures

[0030] An embodiment of the invention will be herein described with reference to and as illustrated in the accompanying figures in which:

Figure 1 shows: a perspective view of a wall and a scaffolding blank adjacent to the wall;

Figure 2 shows: a side view of a wall having a wall protector according to an embodiment;

Figure 3 shows: a side view of a curved wall protector, and

Figure 4 shows: a side view of a resiliently biased wall protector;

Figure 5 shows: a front elevation of a brick face screen formed in accordance with the present invention; and

Figure 6 shows: a side elevation of the screen of Figure 5.

Detailed Description of the Invention

[0031] Example embodiments are described below in sufficient detail to enable those of ordinary skill in the art to embody and implement the systems and processes herein described. It is important to understand that embodiments can be provided in many alternate forms and should not be construed as limited to the examples set forth herein.

[0032] Accordingly, while embodiments can be modified in various ways and take on various alternative forms, specific embodiments thereof are shown in the drawings and described in detail below as examples. There is no intent to limit to the particular forms disclosed and as well as individual embodiments the invention is intended to cover combinations of those embodiments as well. On the contrary, all modifications, equivalents, and alternatives falling within the scope of the appended claims should be included. Elements of the example embodiments are consistently denoted by the same reference numerals throughout the drawings and detailed description where appropriate.

[0033] The terminology used herein to describe embodiments is not intended to limit the scope. The articles "a," "an," and "the" are singular in that they have a single referent, however the use of the singular form in the present document should not preclude the presence of more than one referent. In other words, elements referred to in the singular can number one or more, unless the context clearly indicates otherwise. It will be further understood that the terms "comprises," "comprising," "includes," and/or "including," when used herein, specify the presence of stated features, items, steps, operations, elements, and/or components, but do not preclude the presence or addition of one or more other features, items, steps, operations, elements, components, and/or groups thereof.

[0034] Unless otherwise defined, all terms (including technical and scientific terms) used herein are to be interpreted as is customary in the art. It will be further understood that terms in common usage should also be interpreted as is customary in the relevant art and not in an idealized or overly formal sense unless expressly so defined herein.

[0035] As can be seen in **Figure 1** scaffolding, which is generally shown as I comprises planks 2 which are supported by upright poles 3 so that the scaffolding plank can abut against or is close to a wall 4. Modern scaffolding

is designed to meet current Health and Safety legislation where the scaffolding is designed to ensure that the inside boards i.e. the boards closest to the work surface are now clipped and not removable from the scaffolding supports. When working on buildings, for example when bricklaying, mortar falls from above and it tends to land on the inside board of the scaffolding and splashes the brickwork face. If it then rains the water falling through the scaffold compounds the problem causing even more staining. The present invention seeks to overcome this problem by providing a simple installation process that stops all staining up to 450mm high from the scaffold level.

[0036] **Figure 2** shows a side view of a wall and an adjacent scaffolding plank 2. There is a wall protector generally shown as 10 which has a first (attachment) portion 11 which is attached to the plank 2 and a second (screen) portion 12 which comes into contact with the wall 4. The second portion 12 forms a barrier that extends upwardly in front of the wall face. In this embodiment the first portion is formed as a "shoe" that slips over the end of the scaffolding plank. The shoe is formed of two members, which fit over the upper and lower faces of the end of the plank that is in proximity to the wall. The second portion of the wall protector 12 extends upwardly and either the whole of the barrier rests against the wall, or is may be that the barrier is inclined so that just the end of the barrier is in contact with and rests against the wall. The portion of the wall protector that bridges first portion 11 and second portion 12 is shown as 13 and this closes the gap between the wall and the end of the plank so that not only is a barrier formed against splash-back on the wall 4 but there is also a seal so that no material can fall through the gap onto workers below the scaffold plank.

[0037] The wall protector in **Figure 3** works on a similar principle to that in Figure 2 in that there is first portion 11 that engages with a surface such as a plank 2. There is also a second portion forming a barrier that extends upwardly against the wall 4 and forms a splash-back. In this case the wall protector has a curved section 13 that connects between the portion 11 of the wall protector that is secured to the surface 2 and the second portion forming the upright barrier 12. The curved section can be made of flexible material to allow a bit of give when a person is walking on the blank because there will be some expansion and contraction of the gap between the wall and the plank as the plank flexes with the weight of an individual walking on it. The first portion is shown as being secured to the plank by a fixing member 14 which may be a nail, screw, clip or any other fixing that can allow for the wall protector to be fixed permanently or releasably to the plank.

[0038] **Figure 4** shows a further embodiment in which the second potion 12 forming the upright barrier is biased toward the wall 4. In this figure the biasing is via a spring 15 but any other form of biasing member can be used or the biasing member is actually within the body of the wall protector.

[0039] The wall protector is generally supplied in 1.0m lengths but can be cut and adapted to any size. The first potion forming an adjustable base and will be 225mm, 300mm, 375mm or 450mm in height with a pre tensile bevelled top edge so that it fits tightly to the workface. It will be supplied with a 100mm overlap to give complete coverage and will have a 90 degree return for the corners where the scaffold boards overlap, so as to give complete coverage. The difference in height at corners will mean that the scaffold board will be slightly higher as the scaffold changes direct around the corner. This is taken care of by the return piece. Any difference angles like squints or radius works can also be manufactured in smaller sized pieces to allow for all surface areas of the buildings.

[0040] Once the wall protector has been used and a job completed it can be collected from site for re-use or it can be recycled so providing an environmentally sustainable product.

[0041] The wall protector of the invention has particular benefits in that it is an attractive option for companies in the construction industry who want to prevent the 3-5 courses of mortar staining, which occurs at every scaffold level on all construction and house building sites.

[0042] **Figure 5** and **Figure 6** show a screen formed according to an alternative embodiment and fitted against a brick face.

[0043] The invention alleviates the requirement to use acids on heavy stained areas of a building. Further it is easy to install as it can be integrated into the scaffolding system as the scaffolding is erected during a build. The product is environmentally friendly, and can be collected from site and re-cycled.

[0044] Heavy diesel jet washers are no longer required as the staining is minimal. So a simple II0V power washer is more than adequate to clean large areas of the building quickly and more cost effective. Also spill kits will not be required for the heavy diesel washers when they are placed on the scaffolds, or ground. Contamination to surfaces is zero.

[0045] It's easy to install and is far more cost effective to use than the traditional method of cleaning the staining or "rash", which involves hydrochloric acid and water, and the use of a diesel jet washer which causes additional problems at the work face.

Claims

1. A wall protector which prevents building materials from being splashed back onto a wall from an adjacent surface on which a person can stand, said wall protector being provided as a barrier having an attachment portion arranged to engage with the adjacent surface and a screen portion which, in use, extends adjacent the wall thereby providing a barrier to shield the wall against building material that lands on the adjacent surface from splashing back onto the wall and/or from falling through a gap between

the adjacent surface and the wall.

2. A wall protector according to claim 1, wherein the adjacent surface is a scaffold board and the wall protector is attachable to the scaffold board.

3. A wall protector according to claim 1 or claim 2 which is releasably attachable to the adjacent surface.

4. A wall protector according to any of claims 1 to 3, wherein the attachment portion comprises a channel shaped and dimensioned to receive the adjacent surface.

5. A wall protector according to any preceding claim formed of a polymer material.

6. A wall protector according to claim 5, wherein the polymer is selected from a thermoplastic or a thermoset material.

7. A wall protector according to any preceding claim, wherein the screen portion is resiliently deformable.

8. A wall protector according to any preceding claim, which has a curved surface extending between the adjacent surface and to wall.

9. A wall protector according to any preceding claim, in which the screen portion is resiliently biased to extend from the adjacent surface towards the wall.

10. A device according to any preceding claim, in which the device is attachable to the inside board of scaffolding.

11. A device according to any preceding claim, in which the device is elongate.

12. A device according to any preceding claim, in which the screen portion is generally laminar.

13. A device according to any preceding claim, in which the screen is in contact with the workface in use.

14. A device according to any preceding claim, in which the device fits longitudinally onto the side of a scaffold board in use.

15. A scaffolding system including a wall protector according to any preceding claim.

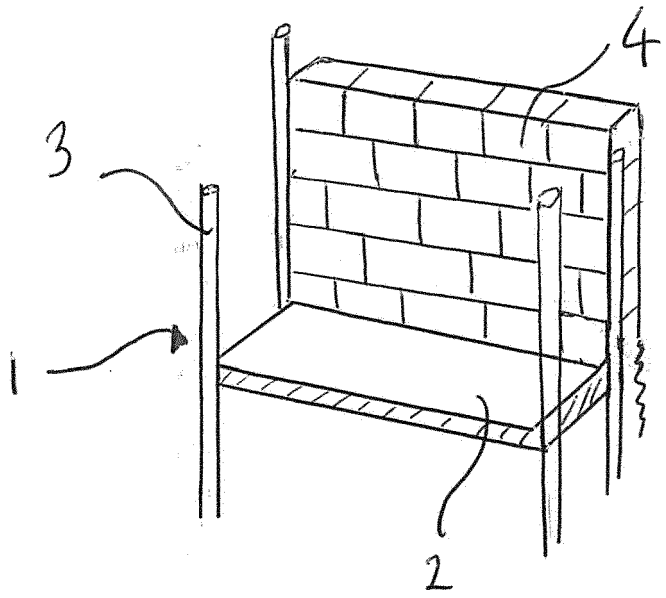

Figure 1

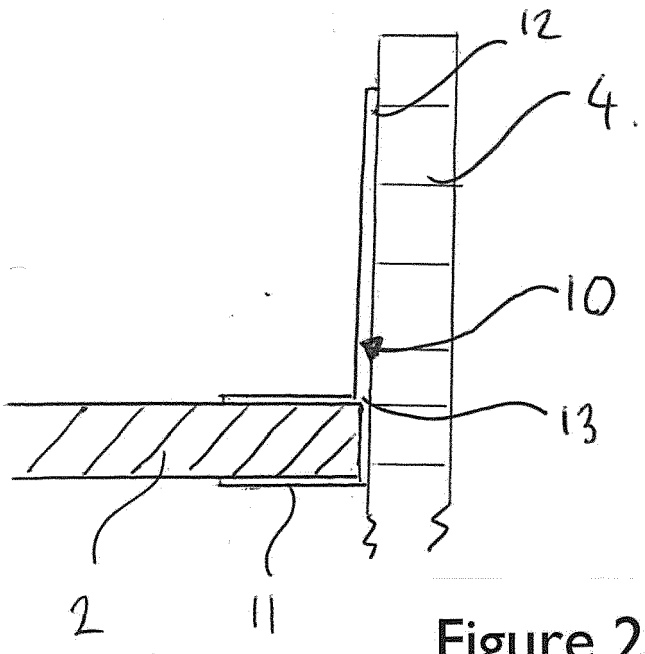

Figure 2

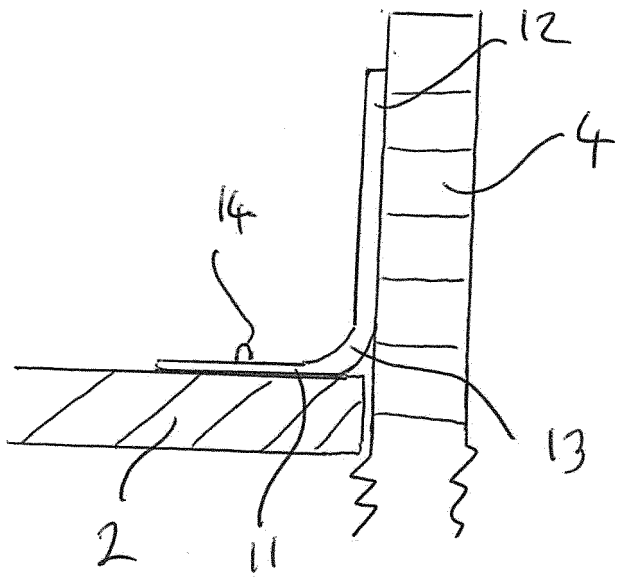

Figure 3

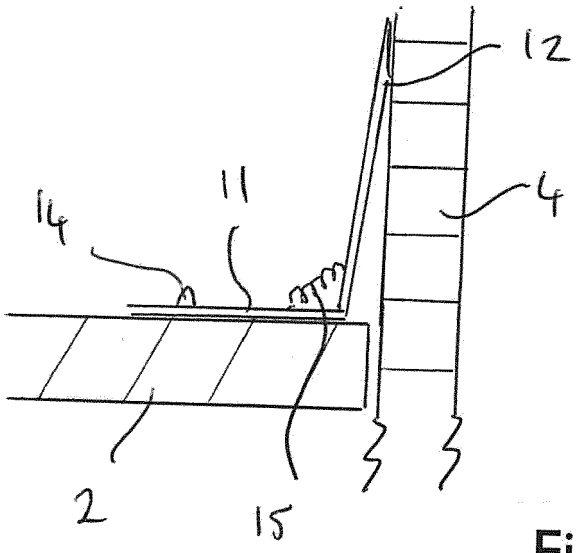

Figure 4

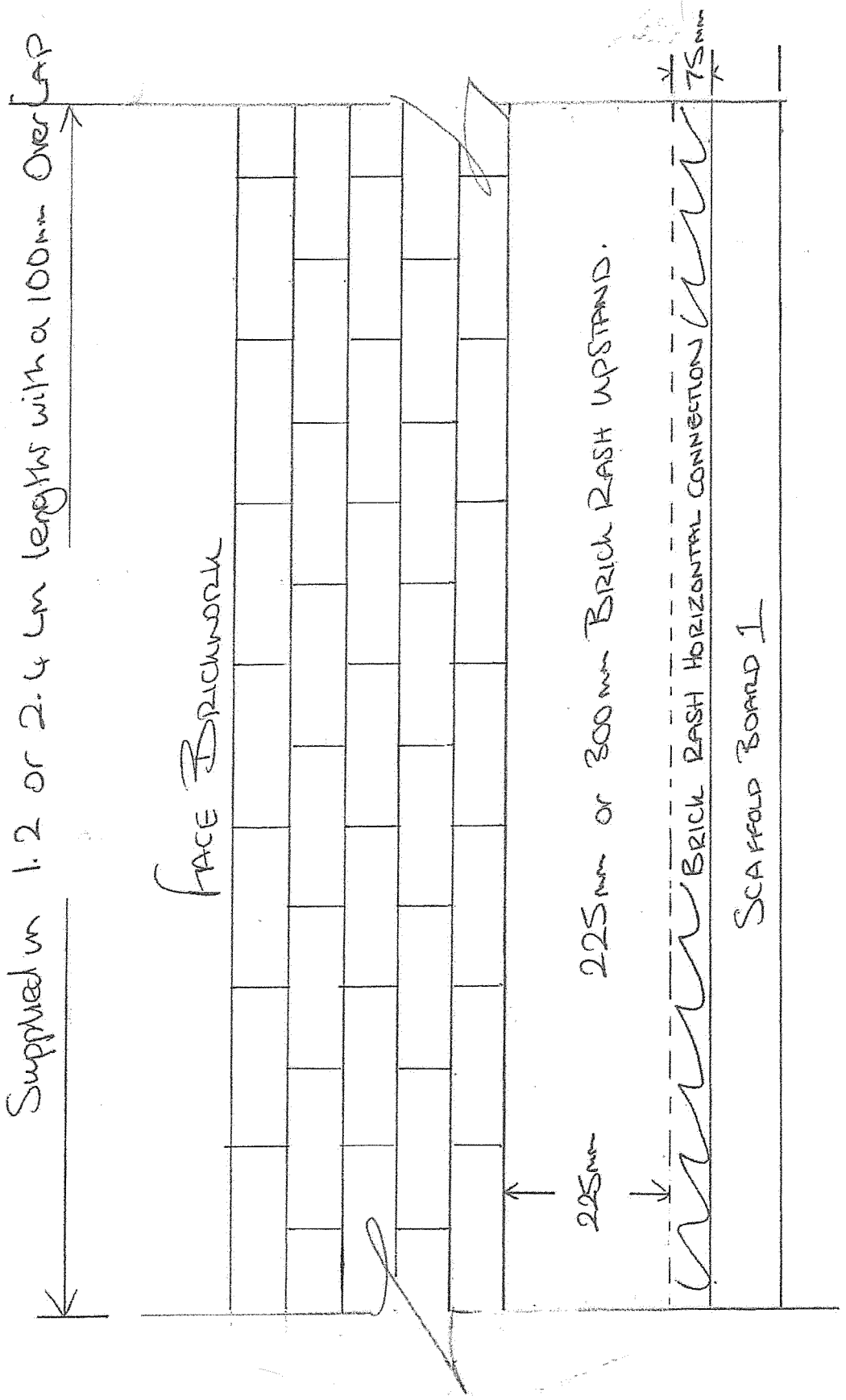
Supplied in 1.2 or 2.4 m lengths with a 100mm Overlap
FACE BRICKWORK
225mm or 300mm BRICK RASH UPSTAND.
BRICK RASH HORIZONTAL CONNECTION
SCAFFOLD BOARD 1
75mm
225mm
FRONT ELEVATION

Figure 5

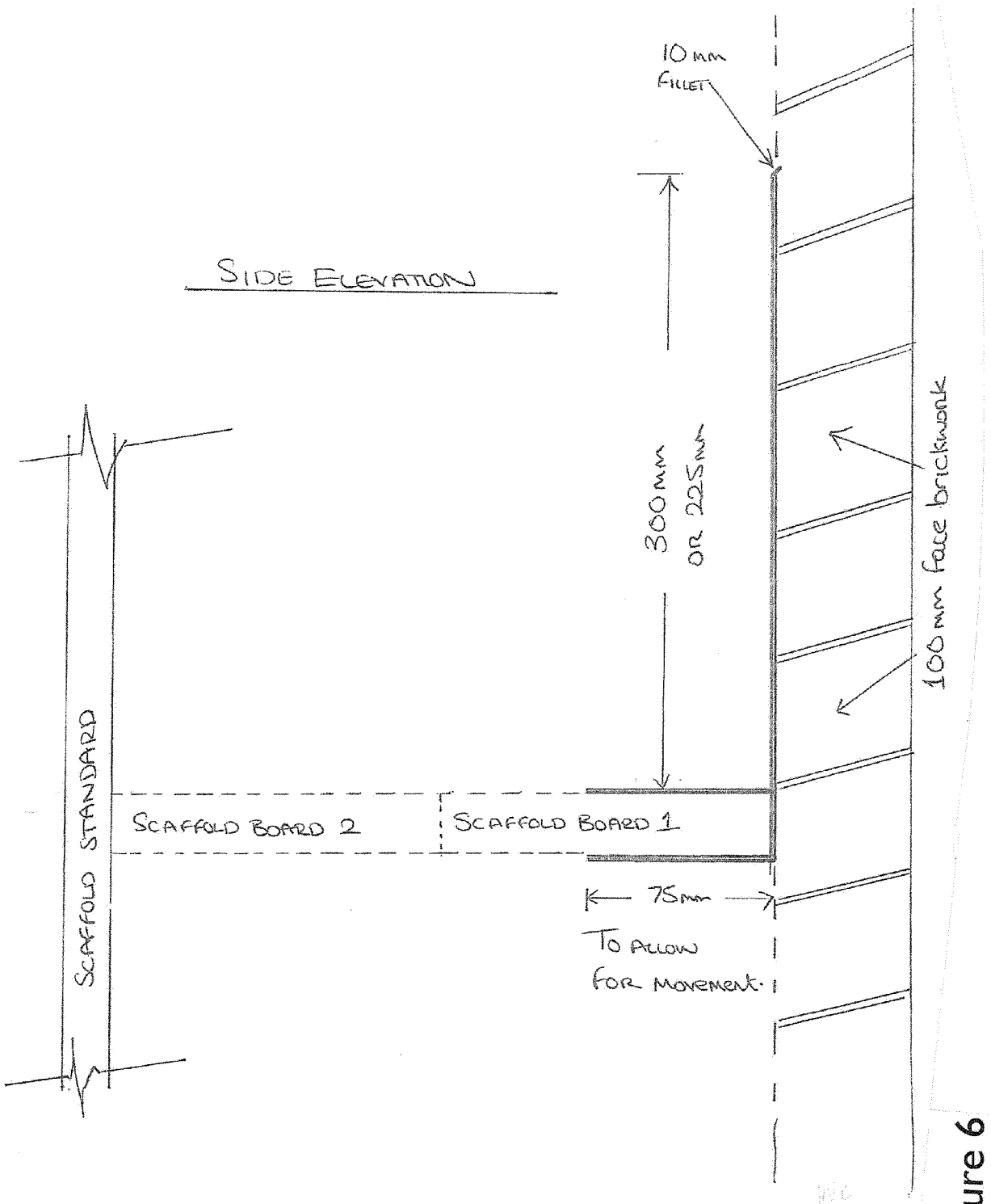
SIDE ELEVATION
10 mm FILLET
300 mm OR 225 mm
100 mm face brickwork
SCAFFOLD STANDARD
SCAFFOLD BOARD 2
SCAFFOLD BOARD 1
75mm
TO ALLOW FOR MOVEMENT.

Figure 6

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EUROPEAN SEARCH REPORT

Application Number
EP 16 27 5051

DOCUMENTS CONSIDERED TO BE RELEVANT

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	27 July 2016	Baumgärtel, Tim

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 16 27 5051

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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27-07-2016

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