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"Set of modular components for building transparent walls and walls made thereof"

Field of the invention

The present invention generally relates to a set of modular components for building removable walls as well as to removable walls made thereof according to the preambles of claims 1 and 14.

Background of the invention

Modular components in the form of hollow blocks consisting of two molded plastic half-blocks, for example of polycarbonate, are disclosed in EP 0 438 110 A1.

Said blocks of transparent plastic are offered as an alternative choice to the hollow glass blocks for building walls which are similar to the so called glass block walls.

Snap lock assemblies having the double function of spacers and coupling elements for coupling adjacent blocks are provided on the perimetral sides of said blocks so that between adjacent blocks an air space is formed which is to be filled with a layer of bonding mortar.

After having built the block wall the latter cannot be disassembled. Therefore, it is not possible to reuse the blocks of a built wall to form a new one or to modify an already built wall.

No teaching is given about the fastening of the plastic block wall to the floor, the ceiling and the room walls of the room in which the plastic block wall is built.

EP 0 452 879 discloses as well transparent plastic blocks made of two half-blocks bonded together and provided at the corners thereof with latch portions integrally

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formed on perimetral flanges. The blocks may also have an oblique perimetral side with different angle values for forming walls with angulated wall sectors.

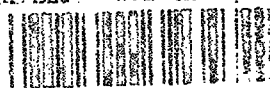
The formed fits or couplings between adjacent blocks provide a perimetral air space in which an adhesive is inserted through apertures provided to this purpose in the perimetral flanges. Also with these blocks it is not possible to disassembly a built wall and reuse the wall blocks because during disassembling said latch elements break. Also this document is silent about how to fasten the built wall to the floor, ceiling and room walls of the room in which said wall is built.

A further plastic block is known which consists of two half-blocks which are bonded together and are perimetally provided with sliding coupling means consisting of two longitudinally aligned ribs on each perimetral block side. The fit is accomplished by means of a first abutting movement of one block towards another one, so that the coupling ribs of both blocks are consecutively aligned, and a subsequent sliding movement along the whole length of said ribs.

The chosen kind of fit permits on the one hand to eliminate the use of adhesive but require on the other hand several disadvantages.

First of all a wall built with said blocks does not have -- due to the necessary sliding clearness -- the necessary stiffness and strength required for partition walls in houses, flats, offices and so on. Secondly, when disassembling a built wall said coupling ribs tend to brake away especially when, for safety purposes, thin adhesive strips are laid between the blocks, and thirdly a complicated block assemblability is to stress which involves practical difficulties and limits in building walls, especially at the perimetral wall edges. The plastic blocks are sold as such so that the wall assembler have to decide, for each wall, how to fasten the block wall to the floor, ceiling and walls of the room in which the block wall is built.

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Bearing in mind that said blocks typically have the form of a quadrangular parallelepiped having a side length of ca. 20 cm, it is not explained how to terminate a wall made of such blocks in connection with the floor, ceiling and walls even if it is obvious that, for example, the top block row of the block wall or a lateral edge thereof could have a distance from the room ceiling or lateral room wall in the range of about 1 to 19,5 cm.

A set of hollow plastic blocks has been disclosed by the inventor in the Italian patent application No. CO98A000012, not yet published. The blocks herein disclosed have the configuration of a regular parallelepiped as well as of a parallelepiped having a perimetral chamfered side, which blocks on each perimetral side thereof are provided with detachable snap fit means. More precisely, on the adjacent perimetral block sides said snap coupling means is accomplished as male coupling ribs whereas on the other two adjacent perimetral block sides the coupling means consists of female coupling ribs.

The coupling/uncoupling of two blocks can be accomplished on each block perimetral side by means of a simple push/pull coupling/uncoupling action onto the block to be joint to or detached from the other one. The blocks having a chamfered perimetral side allow to built indeed walls containing angulated sectors.

However, also in said document the problem about the terminating/fastening of the block wall in the room housing the latter has not been faced. Moreover, the proposed chamfered blocks require high investments for producing the necessary high number of molds as well as an expensive keeping in stock of said plurality of chamfered blocks.

Summary of the invention

The main object of the set of modular components according to the present invention is to eliminate the disadvantages of the known modular blocks and walls built therewith,

and to provide a set of modular components enabling a quick building of rectilinear and/or angulated or bent walls by use of only few types of blocks which can be removably assembled, which set of components is adapted to permit the building of very resistant walls without using adhesives, and allows to terminate the free edges of the erected wall as well as a reliable fixing of the block wall in a room in which the latter is built, and this irrespective of the dimensions and embodiments of said block wall.

This object is achieved according to the present invention with a set of modular components for building transparent walls having the features of claims 1 and 14.

Advantageous embodiments of the set of modular components, the single modular components, and the walls built therewith have the features set forth in the dependent claims.

With the modular set according to the present invention and the walls made thereof several advantages are obtained.

In case of both rectilinear walls and walls with angulated sectors the blocks according to the present invention allow a quick assemblability of the wall starting from the wall bottom upwardly, and a direct coupling of the bottom block row to the floor section as well as of the other wall blocks to the vertical sections, and in case to the ceiling or wall terminating/fastening sections, as well as middle stiffening or reinforcement sections in a number at will, whereby said wall terminating/fastening and/or ceiling sections allow an automatic concealment of the air spaces between the wall top blocks and/or lateral wall edges and the room in which the block wall is built.

Fastening of the proposed sections to the room takes place in a conventional manner, for example by use of screws with plugs and, after fixing, said sections do not require any adjustment work.

The embodiment of the ceiling and /or vertical section with detachable diaphragm with snaply engagement eliminates any need for cutting or adjusting the blocks forming the top block row or a lateral wall edge column or the proposed sections themselves. The provision of said detachable diaphragms also facilitate a disassembling of the wall, whereby both the blocks and the sections themselves can be reused for a further use. The sections made of metal, preferably light alloy, also impart to the block wall a remarkable stability and have rather narrow sides on sight, so that they do not disturb the generally aesthetic aspect of the blocks wall according to the present invention. The provision of one-piece angulated blocks which on the perimetral sides thereof are provided with the suggested detachable snap coupling means, allows first to considerably reduce the number of molds with respect to that requested by chamfered blocks with a consequently simplification and a minor space for keeping in stock. Furthermore, the remarkably resistance and stability of the one-piece angulated blocks impart directly a greater strength or bending resistance to the built walls.

The metal sections according to the present invention can be advantageously produced in several colors in order to make more impressive the aesthetic aspects of the built walls.

It is further stressed that the walls built and assembled without sealants can be at any time easily removed, completed or transformed, for example by forming a door aperture in a previously generally throughout wall or by transforming a partial wall in a generally throughout wall and so on, whereby the terminating sections also allow to fix on the latter the hinges for a door.

A further important advantage due to the fact that no adhesive is used is that the time needed for assembling the wall can be drastically reduced. Another advantage is to be seen in the fact that the concealment of the small abutment slots between adjacent

block is easily accomplished by applying on the wall face an adhesive narrow tape at will, for example made of metal or plastic. Said colored tapes substantially contribute to improve the general aesthetic aspect of the wall, and the tape color can advantageously be decided after having built the respective wall. The tape color, that is the tape itself, can also be changed at any time, by substituting an already applied tape. Besides the particular configuration of the proposed coupling elements, the fact of avoiding the use of adhesives also assures a complete reutilization of the blocks and profiled sections which, after the wall disassembling, are intact and clean because adhesive-free, and therefore immediately ready for a new utilization. The sections made of metal, preferably aluminium alloy, can be cheaply and easily produced by extrusion, and they can be readily fixed in conventional manner by plugs and screws and do not require as well the use either of adhesives or of additional components. The stiffening sections used as vertical sections can as well be used as stringers in order to obtain a greater reinforcement of the wall. The location of said stiffening sections in the wall can be freely chosen and does not require any preliminary accomodation work as the blocks are directly manually fitted into said sections.

Another advantage of the proposed blocks is that along the perimetral air space between adjacent blocks it is possible to lay a small cable as well as small lamps, whereby the latter can also be inserted into the blocks through appropriate holes provided in the perimetral sides thereof. This allows to achieve a functional or decorative lighting, for example a zonal one, of the built walls.

Brief Description of the Drawings

Farther features, details and advantages of the set of modular components for making transparent removable walls, as well as of the walls built with said modular components according to the present invention will be apparent from the following

detailed description taken in connection with the accompanying drawings, in which said set of modular components is shown in a preferred embodiment, which is schematically illustrated on different scales for clarity purposes. In the drawings:

Figure 1 is a front elevation view showing a large side of a modular base block according to the present invention;

Figure 2 is a side elevation view of the block of Figure 1 with a top detail A and a bottom detail B of the detachable snap coupling means in a preferred embodiment thereof;

Figure 3 shows both details A and B of the block of Figures 1 and 2 drawn together, on enlarged scale;

Figure 4 shows, on enlarged scale, a detail of the coupling condition of the snap coupling means of two blocks assembled together of Figures 1 to 3;

Figure 4A shows a detail similar to that of Figure 4 with an alternative embodiment of the detachable snap coupling means according to the present invention;

Figure 5 is a top plan view on a modular angulated block for forming curved walls,

Figures 6, 7 and 8 are elevation views looking generally in the direction of arrows D, B and C, respectively;

Figure 9 is a top view showing the assembled condition of two angulated blocks according to the Figures 5 to 8, the right hand block being shown with dotted lines;

Figure 10 is a top plan view on a second modular angulated block, and more precisely on a 90° angled block;

Figures 11, 12, 13 and 14 are elevation views of the block of Figure 10 looking generally in the directions of arrows A, B, D and C, respectively;

Figures 15, 16 and 17 are cross-sections through a modular stiffening section, a floor or terminating/fastening section, and a ceiling or terminating/fastening section, respectively;

Figure 18 is an exploded sectional view showing the ceiling or wall terminating/fastening section of Figure 17;

Figures 19, 20, 21 and 22 are views showing coupling steps of modular blocks and sections together according to the invention during assembling of walls according to the present invention;

Figures 23 and 24 are schematic front views showing two embodiments of walls according to the invention;

Figures 25, 26 and 27 are top plan views showing further embodiments of walls according to the present invention; and

Figure 28 is an elevation view showing an upset U-shaped wall construction according to the present invention.

Detailed Description of the Preferred Embodiments

In the Figures equal numerals designate equal parts. The set 100 of modular components comprises, for example, a basis modular block generally designated 1 and shown in Figure 1, which is formed of two hollow abutting half-blocks 2 and 3 of plastic, for example of polycarbonate, which are firmly bonded together for example by means of ultrasonic welding or similar as denoted by a seam 4 in Figure 2. A through hole avoiding condensate is denoted by 6. The large front sides 7 and 8 can be provided with a finishing or coloring at will. 9 and 10 designate thin perimetral abutting delimitation flanges as best shown in Figure 4. The detachable snap coupling means consists of a couple of profiled ribs 11 on each perimetral block side which

define a couple with a male configuration 12 or a couple with a female configuration 13 as shown, for example, at the top and bottom of Figure 2.

In a preferred embodiment a couple of male ribs 12 located in a track-like manner is provided, preferably in the center, in two perimetrically adjacent block sides whereas a couple of female ribs 13, located in a track-like manner as well, is provided, preferably in the middle in the other two perimetral adjacent sides of block 1.

A preferred configuration of said profiled ribs 11 forming the rails of said tracks 12 and 13 and allowing a snap fit or coupling are best shown in the enlarged details A and B of figures 3 and 4. In the shown embodiment said track-like coupling means is advantageously created in the form of rail-like ribs 11 having a flat foot or base portion 11A and a profiled portion 11B allowing a snap engagement and having substantially the form of a half-circle or a cam-like projection with rounded corners as shown. Advantageously said rails or profiled ribs 11 of the male-like track 12 or female-like track 13 have the same contour.

Due to the strip-like configuration of the ribs 11 the latter have a good degree of elasticity which can be easily determined in function of the rib thickness, as well known to those skilled in the art. Also a small thinning at the base of ribs 11 (not shown) would facilitate a hinge-like oscillation of ribs 11 during block assembling/disassembling.

What discussed above with respect to the snap coupling means 12 and 13 also applies obviously for all the modular block embodiments according to the present invention.

A similar assembling/disassembling snap behaviour may be accomplished with the alternative rib form or contour allowing a detachable fit shown in Figure 4A in which equal parts or parts equivalent to those shown in Figures 3 and 4 are denoted by equal numerals.

According to the present invention the set 100 of modular components also includes at least a further modular component in the form of an angulated block consisting of two firmly bonded one-piece half-blocks, as illustrated for example for the block 16 which has an angle of 90° shown in Figures 10 to 14 or for the block 17 shown in Figures 5 to 9 for building curved walls having a large radius.

To the blocks 16, 17, as well as to other not shown angulated blocks having a different angle, is common the fact that they form a sturdy one-piece component, and the fact that the bending plane 18 is provided in the block center, that is the blocks 16, 17 have a symmetrical form.

On the perimetral sides of the blocks 16 and 17 they are also provided with the above discussed couples of coupling ribs 11 defining said male 12 and female 13 detachable snap coupling means.

More particularly, the angulated block 17 has a bending angle of 176° and a general taper of 4° as shown in Figure 9, whereby the assembling of these blocks allows to build a curved wall having a radius R of 2866 mm, Figure 26.

Due to its configuration, the modular angulated block 16 of 90° has the large front sides broken down and defined by both surfaces 7, 7A and 8, 8A, respectively.

Moreover, the angulated blocks 16 and 17 have the further features inferable from the modular block 1.

According to the present invention the set 100 of modular components besides the modular blocks 1, 16, 17 may additionally include stiffening sections and/or terminating/fastening sections for perimetral terminating and/or fastening of the built wall in the room housing the latter, whereby said sections are illustrated in cross-section and in walls of Figures 15 to 26.

Said sections are, for example, a stiffening section 20 which can be used as a vertical section and/or a stringer, incorporated in a wall 50 of blocks 1, 16 and 17 or similar blocks, a floor fastening or wall terminating section 21, and a ceiling or composite wall terminating/fastening section 22, figure 15 to 18.

The stiffening section 20, Figure 15, has a double track-like snap fit configuration with opposite tracks 12, 13 and connecting end flanges 24 which project outwardly forming closure flanges 25. As best shown in Figure 15, each track rail 11 is formed and profiled like the above said coupling ribs 11 and represent male 12 and female 13 detachable snap coupling tracks as described hereinabove. Due to sturdiness purposes, section 20 is formed, in the shown example, as a box section, whereby the thickness S of the chamber 23 can be of the same order of magnitude of the abutment grooves of the known glass-block walls, for example of 17 mm. Said chamber 23 is further delimited by the walls 27 and 29.

The floor section 21, Figure 16, has a base side 27 and a track-like configuration 12 with male rails 11 allowing a detachable snap coupling as discussed above.

Due to sturdiness purposes also section 21 has a box-like configuration with a thickness S of the chamber 23 corresponding to the thickness S of the chamber 23 of said stiffening section 20. Projecting closure flanges are denoted by 26.

Said flanges 26 preferably represent a projection of end connection flanges 28. The chamber 23 is further delimited by the walls 27 and 29.

The composite ceiling and wall terminating/fastening section 22 is formed by a base body 31 having a substantially L-shaped cross-section, whereby on the one wing 32 is provided a positioning flange 33 and on the other wing 34 is provided an open seat 35. Said composite section 22 also includes a removable diaphragm-like strip 36 having an internal stop and positioning flange 37 which, in the shown example, has a chamfered

free end 38. In the assembled condition the strip end 39 near the flange 37 rests against the free end 40 of the seat 35 whereas the flange 37 rests against the bent end 41 of said seat 35 and with its free end partially extends parallel to the opening 42 of said seat 35.

Retaining of the diaphragm 36 in said base body 30 takes place with a plurality of clip-like springs 45 which are bent as shown in Figures 17 and 18 and housed in section seat 35. Said springs, which can have a length of for example 3 cm and are snaply inserted into said seat 35 with a distance from each other of, for example, 25-30 cm, have opposite active ends 46, 47 between which the flange 37 is inserted and elastically retained. The correct positioning is facilitated by the stop 48 acting as a positioning stop which should be surpassed by the spring end 47 when disassembling the composite section 22. In an alternative embodiment said spring 45 can also be produced as a bar spring of metal or plastic.

The length of the wings 32 and 36 of said composite section 22 is, in the shown example, of 80 mm and allows to practically conceal in a sure manner the air spaces formed between the top edge of the built wall and the room ceiling as well as between a wall lateral block column or wall edge and the adjacent room wall, respectively.

As inferable from the drawings, said proposed sections 20, 21 and 22 have large surfaces or zones allowing an easy access for drilling holes for screws to be screwed in fastening plugs or the like.

In Figure 19 is illustrated the position of two blocks 1 before coupling the latter on a stiffening sections 20 which can be used as a vertical section or a stringer, whereby from Figure 19 it is also inferable that after assembling the perimetral abutting block flanges 10 will be in an abutment alignment with said closure flange 25 of section 20.

In figure 20 is shown a pre-fitting position between a block 1 of a bottom block row of a wall and a floor section 21, which can also be used as a wall terminating section terminating a free edge of a wall 50, for example in case of a door aperture, Figure 23, and in this case to said section 21 can be fixed the door hinges (not shown). In case of curved walls, Figure 26, the floor section 21 will be preliminarily bent. Bending of section 21 can be carried out without problems by using conventional section bending machines.

Figure 21 shows a floor section 21 and two blocks 1 already coupled therewith and a block 1 before carrying out the coupling thereof. The coupling movements are indicated by the arrows V (vertical movement) and O (horizontal movement). Even if per se indifferent, it is easier to first carry out the vertical coupling between section 21 and block 1 by moving the latter according arrow V and then, by sliding the block 1 along the section 21 according to arrow O, to accomplish the coupling between the blocks.

Due to the smoothness of the surfaces of ribs 11 of the extruded section 21 and the elasticity thereof, the sliding movement of block 1 takes place without any difficulties.

Figure 22 shows how with the ceiling or composite section 22 it is possible to conceal without problems an air space Z formed between the top row of blocks 1 of the wall 50 and the ceiling of the room housing said wall 50. In the same manner it is obviously possible to bridge a similar air space between a lateral wall edge or column of blocks 1 of a wall 50 and the adjacent wall of the room housing said wall 50.

Building steps for mounting a block wall according to the present invention.

Example 1: Example of a partition wall filling the whole cross-section of the room housing said partition wall, Figure 23.

After having fastened the floor section 21, the ceiling section 22 and both wall composite sections 22 (one of which could also be formed by a floor section 21) by means of conventional plugs and screws the first row of blocks 1 is snaply fitted into said floor section 21 and laterally into the terminating and fastening sections 22. From the combined sections 22 is previously removed the diaphragm-like strip 36. The required vertical sections 21 defining the door aperture and the vertical reinforcing sections 20 are also mounted and then is laid the second row of blocks 1 and so on up to the top row. During the assembling of said wall 50 the door lintel 20 as well as other stringers or reinforcing sections 20 are incorporated. After building the wall 50 the composite sections 22 will be closed by snaply applying the diaphragms 36.

Example 2: Example of a partition partial wall with a through aperture therein, Figure 24.

Also in this case, after having fastened in a room the floor section 21, the ceiling section 22 and a wall terminating section 21 (on the left of Figure 24)(or alternatively a further composite section 22) the first row of blocks 1 incorporating the reinforcement section 20 will be laid. The reinforcement stringer 20 as well as the terminating sections 21 defining the aperture 52 are then inserted in the corresponding blocks 1 of the wall 50 during gradually growing of the latter.

Lastly, the wall terminating section 21 (on the right of Figure 24) is applied for terminating the free lateral edge of the wall 50.

Example 3: Curved walls and walls with angulated sections, Figures 26 and 25.

As the angulated blocks 16, 17 are provided with male and female coupling means 12, 13 which are equal to the coupling means of the modular blocks 1, the coupling operations of said angulated blocks 16 and 17 together as well as with the rectilinear modular blocks 1 or the different sections 20, 21 and 22 are carried out as above

described, and also the building of the respectively desired wall 50 will take place as set forth hereinabove.

When the wall 50 is built, without any use of adhesives, the wall abutting grooves between the coupled blocks 1, 16 and 17 will be concealed by applying a removable adhesive tape 53 of metal or plastic (Figure 4) which are preferably colored and are for example at first applied along the horizontal grooves and then along the vertical ones with overlappings at the crossing points thereof.

According to the present invention also the proposed modular sections 20, 21, 22 are colored, so that it is possible to create pleasant chromatic aspects in the walls 50, for example with a desired tonality contrast between the block color and the color of the modular sections and the one of the groove covering tapes.

The disassembling of a wall 50 built with modular blocks and sections of sets 100 according to the present invention takes place in reverse order of the above described operations, which leads to the complete reutilization of the removed blocks and sections for building a new wall or modify an already built wall.

Bearing in mind the above stated teachings for building the wall embodiments of Figures 23 to 26 it is easily possible to build other wall embodiments incorporating the concepts of the present invention as further shown for example in Figure 27, in which also a half-circular covering is made of blocks 17, and in Figure 28, where the wall has curved and angulated sectors.

From the above structural and functional description it is inferable that with the sets of modular components for building disassemblable/transformable/integrable walls according to the present invention it is possible to efficiently achieve the above stated object and to obtain the advantages set forth hereinabove.

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Even if preferably made of polycarbonate, the blocks according to the present invention can practically be produced of any transparent, half-luster, translucent or opaque plastic and with large front sides having any finishing whereas also the aluminium sections can be produced of any material and with any geometric configuration at will, without leaving the scope of the present invention.

Also the single modular block and section components lay in the scope of the present invention, and said components could be freely commercialized in packages containing either equal or mixed modular components for building and/or completing and/or modifying walls or wall sectors.

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Claims

1. Set of modular components for building disassemblable walls comprising at least a plastic hollow modular block provided on its perimetral sides with male and female coupling means

characterized in that it further comprises:

- a) at least a further one-piece angulated modular block (16, 17), and the provided modular blocks (1, 16, 17) having detachable snap coupling means (11, 12, 13) accomplished like a track (12, 13) formed by two rail-like profiled ribs (11) which have such an elasticity and a configuration that they allow a braking-free assembling/disassembling of the blocks (1, 16, 17), and/or
- b) at least a stiffening metal section (20) and/or a terminating/fastening section (21, 22) for the perimetral sides of the wall (50) to be built in a room, which sections (20, 21, 22) are provided with detachable male and female snap coupling means (11, 12, 13) similarly accomplished like a track (12, 13) formed by two rail-like profiled ribs (11) which are adapted to operatively mate with said detachable snap coupling means (11, 12, 13) of said block modular components (1, 16, 17).

2. Set of modular components according to claim 1, characterized in that said at least one further angulated modular component (16) has an angle of 90°.

3. Set of modular components according to claim 1, characterized in that said at least one further angulated modular component (17) has an angle which is slight smaller than 180°, for example of 176°.



4. Set of modular components according to claim 1, characterized in that said at least one further angulated modular component (17) has an angle in the range of 178° and 90° .
5. Set of modular components according to one or more of claims 1 to 4, characterized in that said male and female rib-like snap coupling means consists of ribs having a strip-like foot portion (11A) and an adjacent integral profiled strip-like portion (11B). (Figure 4)
6. Set of modular components according to claim 5, characterized in that said profiled strip-like portions (11B) have the same contour.
7. Set of modular components according to claims 1 to 5, characterized in that the male ribs have a substantially circular or oval contour (11B) whereas the female ribs have a hollow substantially half-circular contour. (Figure 4A)
8. Set of modular components according to claim 1, characterized in that the stiffening section (20) used as a vertical section or a stringer has a double track configuration (12, 13) in the form of opposite tracks (12, 13) with abutment edge flanges (25), whereby each track (12, 13) consists of two rails (11) which are configured and disposed like the profiled coupling male (12) and female (13) ribs (11) of the modular block components (1, 16, 17).
9. Set of modular components according to claim 1, characterized in that the floor or terminating section (21) has a bottom side (27), preferably in the form of a box section,



provided with a track-like configuration and projecting abutment flanges (26), whereby the track rails (11) are configured and disposed like the couple of male (11) and female (13) coupling ribs of the modular blocks (1, 16, 17).

10. Set of modular components according to claim 1, **characterized** in that the ceiling or wall terminating/fastening section (22) is a composite section having a substantially U-shaped cross-section and consisting of a base body (31) having a substantially L-shaped cross-section, a removable diaphragm-like strip (36), and a positioning and/or fixing elastic means (45), whereby the length of the wings (32, 36) of said composite section (22) allows to conceal the air spaces formed between the top block row or a lateral wall edge and the ceiling or wall of the room in which a block wall (50) is built.

11. Set of modular components according to claim 10, **characterized** in that the diaphragm-like strip (36) has an inner positioning flange (37) which, in the assembled condition, rests onto a counter-flange (41) of the base body (31) and at the same time it is latchable between opposite ends (46, 47) of one or more latching springs (45) housed in an appropriate open seat (35) provided in the base body (31) of said section (22).

12. Set of modular components according to claim 1, **characterized** in that said floor or terminating section (21) as well as said ceiling or wall section (22) are provided with large surfaces enabling an easy access for drilling holes therein for fixing screws.



13. Set of modular components according to claim 1, characterized in that it comprises removable adhesive plastic or metal tapes (53) for concealing the perimetral slots formed between abutting blocks (1, 16, 17).

14. Wall made of plastic modular hollow blocks, characterized in that it is built with modular block components (1, 16, 17) and/or floor sections (21) and/or wall terminating/fastening sections (22) and/or stiffening sections (20) according to one or more of claims 1 to 13.

15. Hollow plastic modular blocks and/or modular extruded sections for making walls (50), wherein said modular components (1, 16, 17, 20, 21, 22) have a configuration as set forth in one or more of the claims 1 to 13, and wherein said components (1, 16, 17, 20, 21, 22) are packed in groups of equal or mixed components (1, 16, 17, 20, 21, 22).