Amended Claims

1. A covered walkway, comprising a base (1), two pillars (2) which are fixedly connected to the base (1), a bearing beam (3) bridging over tops of the two pillars (2), and a cover (5) secured on the bearing beam (3),

characterized in that each pillar (2), the bearing beam (3), and the cover (5) are each formed by a complete-prefabricated member;

each pillar (2) is provided at its top with a bearing recess (21), and a reserved, exposed reinforcing bar extending along the bearing recess (21) upwardly to the cover (5);

the bearing beam (3) is in engagement with the bearing recess (21) at an end thereof, and provided with reserved, exposed reinforcing bars at the end and the top thereof respectively, wherein the reserved, exposed reinforcing bar arranged at the end of the pillar (2) is bound with that arranged at the end of the bearing beam (3);

the cover (5) includes a plurality of complete-prefabricated plate units (51), wherein each complete-prefabricated plate unit (51) is in engagement with the bearing beam (3) and with the pillar (2) at respective ends thereof, and is provided with reserved, exposed reinforcing bars connected with the reserved, exposed reinforcing bars of the bearing beam (3) and of the pillar (2), respectively; and

the pillar (2), the bearing beam (3) and the complete-prefabricated plate units (51) are connected together through cast-in-situ concrete in the bearing recess (21) and at regions where the complete-prefabricated plate units (51) are connected with the bearing beam (3) and the pillar (2) respectively.

2. The covered walkway according to claim 1, characterized in that each pillar (2) is provided at its bottom with an inner grouting chamber (22) in communication with a bottom surface of the pillar (2), and a grouting channel (23) and a discharging channel (24), which both connect the inner grouting chamber (22) with a side surface of the pillar (2); and

the base (1) is provided with a reinforcing bar extending upwardly to the inner grouting chamber (22), and the base (1) and the pillar (2) are connected with each other through concrete poured into the inner grouting chamber (22).

3. The covered walkway according to claim 2, characterized in that at least two complete-prefabricated plate units (51) are arranged between two adjacent bearing beams (3);

a bridging portion (511) is provided at a region where one of the complete-prefabricated plate units (51) is connected with an adjacent complete-prefabricated plate unit (51), at a region where the complete-prefabricated plate unit (51) is connected with the pillar (2), and at a region where the complete-prefabricated plate unit (51) is connected with the bearing beam (3);

the bridging portion (511) has a smaller thickness and a lower top surface compared with a middle portion of the complete-prefabricated plate unit (51); and

the bridging portion (511) is provided with a reserved, exposed reinforcing bar, which is spliced with a corresponding reserved, exposed reinforcing bar of an adjacent member, and said at least two complete-prefabricated plate units (51) are connected with the pillar (2) and the bearing beam (3) together through in-situ casting concrete at the bridging portion (511).

4. The covered walkway according to any one of claims 1 to 3, characterized in that the cover (5) further includes two vertical railing plates (52), which are prefabricated on the complete-prefabricated plate unit (51) and formed into one piece therewith.

5. A construction method for the covered walkway of claim 1, characterized in that the method comprises the following steps:

Step A, securing two prefabricated pillars (2) on the base (1);

Step B, hoisting the prefabricated bearing beam (3) and placing it at the bearing recess (21) arranged a top of each of the pillars (2), and binding the reserved, exposed reinforcing bars located at the end of the bearing beam (3) with that located at the top of the pillar (2);

Step C, hoisting one of the complete-prefabricated plate units (51) to a position between two adjacent bearing beams (3), and binding the reserved, exposed reinforcing bars located at both ends of the complete-prefabricated plate unit (51) with those located at the tops of the bearing beam (3) and the pillar (2); and

Step D, pouring concrete in the bearing recess (21) and in the regions where the complete-prefabricated plate unit (51) is connected with the bearing beam (3) and with the pillar (2), so that the pillar (2), the bearing beam (3) and the complete-prefabricated plate unit (51) are connected together.

6. The construction method for the covered walkway according to claim 5, characterized in that the pillar (2) is provided at its bottom with an inner grouting chamber (22) in communication with a bottom surface of the pillar (2), and a grouting channel (23) and a discharging channel (24), which both connect the inner grouting chamber (22) with a side surface of the pillar (2);

in Step A, a reinforcing bar protruding upwardly from the base (1) is provided, and the prefabricated pillar (2) is hoisted to the base (1) in alignment with the protruding reinforcing bar, so that the protruding reinforcing bar is inserted into the inner grouting chamber (22) of the pillar (2), and then concrete is poured into the inner grouting chamber (22) through the grouting channel (23), until concrete slurry is discharged from the discharging channel (24), with the pillar (2) being supported by slanting braces finally.

7. The construction method for the covered walkway according to claim 6, characterized in that

in Step C,

at least two complete-prefabricated plate units (51) are arranged between every two adjacent bearing beams (3); and

a thin and low bridging portion (511) is provided at a region where a complete-prefabricated plate unit (51) is connected with an adjacent complete-prefabricated plate unit (51), at a region where the complete-prefabricated plate unit (51) is connected with the pillar (2), and at a region where the complete-prefabricated plate unit (51) is connected with the bearing beam (3), wherein the bridging portion (511) is provided with a reserved, exposed reinforcing bar, which is spliced with a corresponding reserved, exposed reinforcing bar of an adjacent member, and

in Step D, the complete-prefabricated plate units (51) are connected with the bearing beam (3) and the pillar (2) together through in-situ casting concrete at the

bridging portion (511).

8. The construction method for the covered walkway according to any one of claims 5 to 7, characterized in that prior to the Step A, a metal support for supporting the bearing beam (3) is arranged on an inner top end of the prefabricated pillar (2), and multiple metal supports for supporting the complete-prefabricated plate unit (51) are arranged on each of both side surfaces of the bearing beam (3).