CLAIMS

1. A construction information integration system managing automated operation of a crane, the system comprising:

an architectural information acquiring unit that acquires architectural information including information related to a design, a construction member, and a construction plan of a building to be constructed;

a plan information generation unit that generates, on the basis of the architectural information, first plan information including at least installation coordinates and order of installation for the construction member; and

a first transmission unit that transmits the first plan information to a machine body control system provided as a separate system from the construction information integration system to control operation of the crane so as to transport the construction member,

wherein the plan information generation unit generates second plan information including at least an installation direction for the construction member on the basis of the architectural information,

the construction information integration system further comprising a second transmission unit that transmits the second plan information to a jig control system that controls operation of a jig associated with the crane.

2. The construction information integration system according to claim 1, wherein

the first plan information comprises restriction range information that indicates an area where entry has to be avoided and which is used by the machine body control

system to calculate a path along which the construction member is transported by the crane to the installation coordinates.

3. The construction information integration system according to any one of claims 1 to 2, further comprising:

a first receiving unit that receives, from the machine body control system, an operation log of the crane related to an installation status of the construction member; and

a progress management unit that manages progress with respect to the construction plan on the basis of the operation log of the crane.

4. The construction information integration system according to claim 3, wherein the operation log of the crane includes information related to identification information that can be used to identify the construction member, starting time and ending time for the operation of the crane, and the installation coordinates of the construction member.

5. The construction information integration system according to claim 3 or 4, further comprising a second receiving unit that receives an operation log of the jig related to an installation status of the construction member from a jig control system that controls the operation of the jig associated with the crane, wherein

the progress management unit manages progress with respect to the construction plan on the basis of the operation log of the jig.

6. The construction information integration system according to claim 5, wherein the operation log of the jig includes information related to identification information that can be used to identify the construction member, starting time and ending time for the operation of the jig, and an installation direction for the construction member.

7. The construction information integration system according to any one of claims 4 to 7, wherein the progress management unit indicates progress including at least one of overall progress about a project, daily progress, and progress in units of floors.

8. The construction information integration system according to any one of claims 1 to 7, further comprising:

a construction member information acquiring unit that acquires construction member information related to the construction member provided with the identification information that can be used for identification; and

a third transmission unit that transmits the construction member information to a terminal device.

9. A construction information integration system automated operation of a crane, the system comprising:

an architectural information acquiring unit that acquires architectural information including information related to a design, a construction member, and a construction plan of a building to be constructed;

a plan information generation unit that generates, on the basis of the architectural information, first plan information including at least installation coordinates and order of installation for the construction member; and

a first transmission unit that transmits the first plan information to a machine body control system provided as a separate system from the construction information integration system to control operation of the crane so as to transport the construction member,

wherein the plan information generation unit generates second plan information including at least an installation direction for the construction member on the basis of the architectural information,

the construction information integration system further comprising a second transmission unit that transmits the second plan information to a jig control system that controls operation of a jig associated with the crane;

further comprising a third receiving unit that receives preparation completion information that indicates that the identification information that is provided to the construction member and that can be used for identification has been confirmed by the terminal device,

wherein the first transmission unit transmits, to the machine body control system, a starting instruction indicating the start of operation of the crane on the basis of the preparation completion information and the first plan information.

10. The construction information integration system according to any one of claims 1 or 8, wherein the first plan information and the second plan information include the same information.

11. A construction information integration method carried out by a construction information integration system managing automated operation of a crane, the method comprising the steps of:

acquiring architectural information including information related to a design, a construction member, and a construction plan of a building to be constructed;

generating first plan information including at least installation coordinates and order of installation for the construction member on the basis of the architectural information; and

transmitting the first plan information to a machine body control system provided as a separate system from the construction information integration system to control operation of the crane so as to transport the construction member,

wherein the plan information generation unit generates second plan information including at least an installation direction for the construction member on the basis of the architectural information,

the construction information integration system further comprising a second transmission unit that transmits the second plan information to a jig control system that controls operation of a jig associated with the crane.

12. A construction information integration program causing a computer to carry out a construction information integration method managing automated operation of a crane, the program executing the steps of:

acquiring architectural information including information related to a design, a construction member, and a construction plan of a building to be constructed;

generating first plan information including at least installation coordinates and order of installation for the construction member on the basis of the architectural information; and

transmitting the first plan information to a machine body control system provided as a separate system from the construction information integration system to operation of the crane so as to transport the construction member,

wherein the plan information generation unit generates second plan information including at least an installation direction for the construction member on the basis of the architectural information,

the construction information integration system further comprising a second transmission unit that transmits the second plan information to a jig control system that controls operation of a jig associated with the crane.