WHAT IS CLAIMED IS:

1. A processing method for a workpiece, comprising:

a stacking step of stacking a sheet and a flat plate on a front side of the workpiece to form a stack in which the sheet is held between the workpiece and the flat plate, wherein the sheet does not have adhesiveness and cannot be bonded to the workpiece at room temperature,

a thermocompression bonding step of thermocompression bonding the sheet to the front side of the workpiece while planarizing a back side of the sheet with the flat plate by heating the sheet via a back side of the workpiece and applying an external force to the stack via the flat plate, such that only the sheet is thermocompression bonded to the front side of the workpiece,

a holding step of holding the front side of the workpiece via the sheet by a holding table, after performing the thermocompression bonding step, the holding table having a transparent portion with a transparent member included therein,

an alignment step of performing an alignment by imaging the front side of the workpiece through the transparent portion and the sheet, after performing the holding step, and

a processing step of processing the workpiece from the back side of the workpiece by a processing unit after performing the alignment step.

2. The processing method according to claim 1, wherein

the workpiece has projections and depressions on the front side,

the sheet has a thickness greater than a difference in height between the projections and the depressions,

the sheet is stacked on the front side of the workpiece in the stacking step,

the sheet is thermocompression bonded to the front side of the workpiece in the thermocompression bonding step,

the workpiece is held on the front side of the workpiece via the sheet by the holding table in the holding step, and

the workpiece is processed from a back side of the workpiece by the processing unit in the processing step.

3. The processing method according to claim 1, wherein

the workpiece has, on the front side of the workpiece, a device region in which a plurality of devices is formed, and

the sheet has an adhesive layer at a region not corresponding to the device region of the workpiece.