

Element Files ("Elements" Table)

Each element for each element group has exactly one record in this database.

All elements are oriented and numbered as described in the ALGOR User's Guide. If a given processor requires a different orientation, it is the responsibility of the processor to re-orient the element during the read operation. For this database, there are definitive assignments for nodes in this table. In accordance with the ALGOR User's Guide, lower-order elements may have duplicate node numbers.

The access routines enforce that the combination of group number / element number is unique within the model.

Field Name	Type	Description
Group	Integer	The element group number.
Element	Integer	Element number. The element number must be unique within an element group and always greater than 0. All elements within an element group (same number for Group) must be numbered consecutively from 1 to EGroup(i).General.Count.
Mat_ID	Integer	Pointer to the material data. Must be 0 if not applicable.
Prop_ID	Integer	Pointer to a property block within the Egroup. Must be 0 if not applicable.
N01	Integer	End node number.
N02	Integer	End node number.
N03	Integer	End node number.
N04	Integer	End node number.
N05	Integer	End node number.
N06	Integer	End node number.
N07	Integer	End node number.
N08	Integer	End node number.
N09	Integer	Mid-side node number.
N10	Integer	Mid-side node number.
N11	Integer	Mid-side node number.
N12	Integer	Mid-side node number.
N13	Integer	Mid-side node number.
N14	Integer	Mid-side node number.
N15	Integer	Mid-side node number.
N16	Integer	Mid-side node number.

N17	Integer	Mid-side node number.
N18	Integer	Mid-side node number.
N19	Integer	Mid-side node number.
N20	Integer	Mid-side node number.
N21	Integer	Supplemental node number. Specific meaning: <ul style="list-style-type: none"> • Center of a brick element • Center of a plate/shell element • Orientation (K) node of a beam element

Additional requirements for specific element types:

- If Egroup(i).General.Type is 1 or 3 and you have a triangle, N04 must be zero (do not duplicate N03).

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