

Universal Dataset Number 2452

Universal Dataset

Number: 2452

Name: Permanent Groups

Status: Current

Owner: Simulation

Revision Date: 18-December-2000

```
Record 1:      FORMAT(8I10)
                Field 1      -- group number
                Field 2      -- active constraint set no. for group
                Field 3      -- active restraint set no. for group
                Field 4      -- active load set no. for group
                Field 5      -- active dof set no. for group
                Field 6      -- active temperature set no. for group
                Field 7      -- active contact set no. for group
                Field 8      -- number of entities in group

Record 2:      FORMAT(20A2)
                Field 1      -- group name

Record 3-N:    FORMAT(8I10)
                Field 1      -- entity type code
                Field 2      -- entity tag
                Field 3      -- entity node leaf id.
                Field 4      -- entity component/ ham id.
                Field 5      -- entity type code
                Field 6      -- entity tag
                Field 7      -- entity node leaf id.
                Field 8      -- entity component/ ham id.
```

Repeat record 3 for all entities as defined by record 1, field 8.

Records 1 thru n are repeated for each group in the model.

Entity node leaf id. and the component/ ham id. are zero for all entities except "reference point", "reference point series" and "coordinate system".

Permanent group entity type codes

Entity Type Code	Entity Description
1	coordinate system
2	data surface thickness
3	force on point
4	force on edge
5	traction on face
6	pressure on face
7	nodes
8	finite elements
9	dof sets, dof entities
10	constraint sets, coupled dofs
11	constraint sets, mpc equations
12	restraint sets, nodal displacements
13	restraint sets, nodal temperatures
14	load sets, nodal forces
15	load sets, nodal temperatures
16	load sets, nodal heat sources/sinks
17	load sets, face pressures
18	load sets, edge pressures
19	load sets, face heat fluxes

20 load sets, edge heat fluxes
 21 load sets, face heat convections
 22 load sets, edge heat convections
 23 load sets, face heat radiations
 24 load sets, edge heat radiations
 25 load sets, element heat generations
 26 load sets, beam temperatures
 27 trace lines
 28 beam force
 29 beam distributed load
 30 data surface
 31 data curve
 32 displacement on point (restraint)
 33 displacement on edge (restraint)
 34 displacement on surface (restraint)
 35 temperature on point (restraint)
 36 temperature on edge (restraint)
 37 temperature on face (restraint)
 38 temperature on point (temperature)
 39 temperature on edge (temperature)
 40 temperature on face (temperature)
 41 heat source on point
 42 heat flux on edge
 43 convection on edge
 44 radiation on edge
 45 heat flux on face
 46 convection on face
 47 radiation on face
 48 geometry contact region
 49 fe contact region
 50 contact pair
 51 kinematic dof on point
 52 kinematic dof on edge
 53 kinematic dof on face
 54 element definition
 55 anchor node
 56 edge dependancy mesh definition
 57 fem point connector
 58 vertex
 59 edge
 60 face
 61 region
 62 wireframe connector
 63 wireframe curve
 64 wireframe section
 65 wireframe region
 66 reference point
 67 reference point series
 68 centerpoint

Example:

```

-1
2452
      1      0      1      1      0      5
PERMANENT GROUP1
      7      25      0      0      8      1      0      0
     12      1      0      0     12      2      0      0
     14     22      0      0
-1
  
```

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