



Apply customary joint "restraints" (support conditions) as shown





## Select both nodes at Joint 1 and select: "Assign – Joint – Constraints"

Add new "Body Constraint" and check all DOFs (this makes a rigid connection between members)





Add another "Body Constraint" for Joint 2 (same DOF constraints)

Apply respective joint constraints to both sets of nodes (color will change each time)



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|------------------|--------|------------|---------|-----------|-------------|----------|---------|---------|---------------|----------|-------|------|---|-------------------|-----|----------|-------|--------------------|--------------|----------|------------|------------|-------|-------|--------|------|----------|-------|
| File             | Edit   | View       | Defin   | e Dra     | w Select    | t Assign | Analyze | Display | Design        | Options  | Tools | Help |   |                   |     |          |       |                    |              |          |            |            |       |       |        |      |          |       |
|                  |        | - e        | 26      |           |             |          |         | 9, 191  | 3-d <b>Xy</b> | xz yz nv | 3 60  | ≜ ₹  |   | 2                 | 111 | ∱- nd  - | I.    | - 🛄                | •            |          |            |            |       |       |        |      |          |       |
|                  | X      | oint Loads | (DEAD   | ) (As Def | ined)       |          |         |         |               |          |       |      |   |                   |     |          |       |                    |              |          |            |            |       |       |        |      |          | • ×   |
| -9-              |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          | ¥     |                    | c            |          |            |            |       |       |        |      |          |       |
| n.               |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          | Assi  | ign Joint I        | Forces       |          |            |            |       |       | ~      |      |          |       |
|                  |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          | lor   | erai<br>ad Dattarr |              | D        | EAD        |            |       |       |        |      |          |       |
| 51               |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     | GLOBAL   |       |                    |              |          |            |            |       |       |        |      |          |       |
| 52               |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          | Cod   | ordinate :         | system       |          |            |            |       |       |        |      |          |       |
|                  |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          | Force | es                 |              |          |            |            |       |       |        |      |          |       |
|                  |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          | For   | rce Globa          | IX           |          |            | -12        |       | kN    |        |      |          |       |
|                  |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          | For   | ce Globa           | IY           |          |            | 0          |       | kN    |        |      |          |       |
|                  |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          | For   | ce Globa           | ١Z           |          |            | 0          |       | kN    |        |      |          |       |
|                  |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          | Mo    | oment abo          | out Global ) | x        |            | 0          |       | kN-mm |        |      |          |       |
|                  |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          | Mo    | ment abo           | out Global \ | Y        |            | 0          |       | kN-mm |        |      |          |       |
|                  |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          | Mo    | ment abo           | out Global 7 | Z        |            | U          |       | kN-mm |        |      |          |       |
| Ser.             |        | •          |         |           | FSE         | C1       |         |         |               |          |       |      |   |                   |     |          | Opti  | ons                |              |          |            |            |       |       |        |      |          |       |
| $\times$         |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          | 0     | Add to             | Existing Loa | ads      |            |            |       |       |        |      |          |       |
| -¢•              |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          | ۲     | Replace            | Existing Lo  | bads     |            |            |       |       |        |      |          |       |
| 2                |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          | 0     | ) Delete I         | Existing Loa | ads      |            |            |       |       |        |      |          |       |
| 0.0              |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          |       |                    |              | Parat Ea | rm to Defr | ault Value |       |       |        |      |          |       |
|                  |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          |       |                    |              |          |            |            |       |       |        |      |          |       |
| all <sup>a</sup> |        | 1          |         |           |             |          |         |         |               |          |       |      |   |                   |     |          |       |                    | OK           |          | Close      |            | Apply |       |        |      |          |       |
| PS"              |        | *          |         |           |             |          |         |         |               |          |       |      |   |                   |     |          |       |                    |              |          |            |            |       |       |        |      |          |       |
| cir <sup>a</sup> |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          |       |                    |              |          |            |            |       |       |        |      |          |       |
| :22              |        | •          | ≻×      |           | FSE         | 62       |         |         | €12           | FSEC3    |       | •    |   | FSEC <sup>2</sup> | 4   |          | •     |                    | FSEC5        | )        |            |            |       |       |        |      |          |       |
|                  |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          |       |                    |              |          |            |            |       |       |        |      |          |       |
|                  |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          |       |                    |              |          |            |            |       |       |        |      |          |       |
|                  |        |            |         |           |             |          |         |         |               |          |       |      |   |                   |     |          |       |                    |              |          |            |            |       |       |        |      |          |       |
| ¥.71             | lane ( | a v_0      |         |           |             |          |         |         |               |          |       |      |   |                   |     |          |       |                    |              |          |            |            |       | 4     |        | OBAL | V KN m   | m C v |
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Apply joint loading to one node at Joint 2 (since connection is rigid force will transfer to both members)

\*Note: If you have performed the constraint assignment properly, after running the analysis the displacement(s) at each set of nodes should be equivalent.