

How It Feels To Be A Structure

Application of Architectural Concepts

The pressure you have been feeling, that tightening up of various parts of your body, is called tension, when applied to a structure.

The most basic structural system is the post (or column) and lintel (or beam). Almost every building will use this system somewhere in its structure.

10. Stand in pairs, side-by-side, with your arms outstretched to the side. Each person is the same as a post (column). Your arms are similar to a lintel (beam) that is supported by the post (column). When posts (columns) are joined together in a row, they help support each other. If your fingers are just touching, you won't be able to hold much of a load on your hands, and your arms will get tired quickly. (Position A)

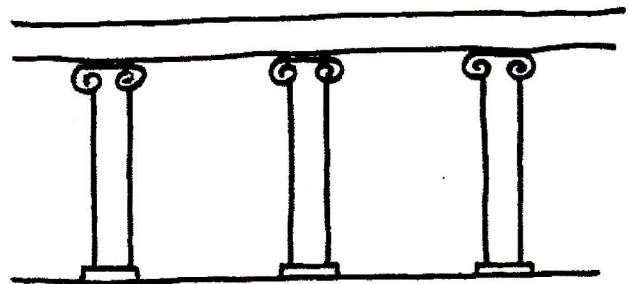
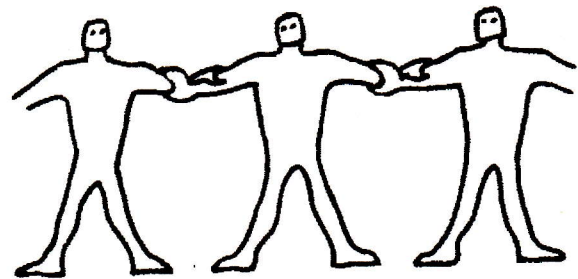
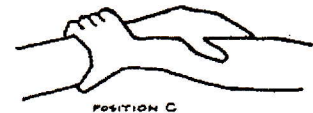
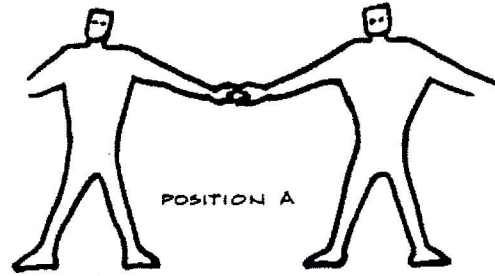
Now lock your fingers together and pull against each other (Position B). See how much stronger you feel?

Now interlock your hands and arms up to your elbows and pull against each other (Position C). Does that feel different? Much stronger? Your arms are reinforcing each other.

11. Have groups of three or four students stand in a row with arms outstretched. With only the fingers touching, the columns and beams do not affect each other at all. Try each of the two interlocking positions, B and C. Which seems the strongest? Where do you think the beams will be the weakest? (At the center)

Each person is the same as a post or column. Your arms are the lintels or beams that are supported by the posts (columns). When these structural members are joined together, they help support each other.

When a series of posts and lintels (columns and beams) are put together in a row, it is called a colonnade.



COLONNADE