Though they are not as stiff as domes or saddles, cylinders structures still make strong, inexpensive roofs. As long as they're designed to prevent outward thrusts. If built using longitudinal support the structure acts like a series of arches, as such it develops outward thrusts. If built using curved end support, it behaves like a beam, and does develop outward thrusts.

A folded plate system acts like a series of barrel shaped roofs. They are created using long elevated roofs. These slabs are joined at the concrete slabs. These slabs are placed to line ridges and valleys. These systems are cost efficient because they use little formwork and easy to construct because they can be poured on the ground. These systems do not develop outward thrusts.

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Architecture 162
Fall Semester

COS
Division of Industry and Technology

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