



Aluma Systems

When: 1972
What: Industrial scaffolding and concrete forming and shoring
Where: Edmonton, Calgary and Fort McMurray
Who: For scaffolding production: 1,400 field employees and 60 full-time staff, including carpenters, scaffolders, insulators, cladders, painters and blasters.
For concrete formwork: 30 employees including carpenters and yard workers.

Aluma Systems splits into two divisions. Aluma's industrial services division provides industrial scaffolding built to occupational health and safety standards. Aluma's concrete construction division, on the infrastructure services side, provides high-efficiency concrete forming and shoring for projects ranging from hotels and stadiums to airports and power plants.

Rick Moran looks after the scaffolding side of operations in Alberta, and as director and general manager, he notes the company's reputation is built on forward-thinking and safety. "Innovation is the cornerstone of our success," says Moran. "Aluma's created many unique scaffolding components which have won awards for productivity and safety. Our big challenge is constantly raising the bar on safety, staying on top of new government and client regulations."

Aluma supplies three types of industrial scaffolding, depending on site requirements: frame and brace, tube and clamp, and its famed Sure Lock system. As for how high up scaffolding goes, the sky's the limit. "Heights range from small step-up units to the 160-foot landing platform we recently designed to repair one of Syncrude's boilers," Moran explains. "And it's all cold-weather tested for our northern climate." Many of Aluma's Alberta clients are in the energy sector, and upcoming projects include scaffolding for Shell and Total bitumen upgraders near Fort Saskatchewan and for North West near Redwater.

Gary Hill is plant manager of Aluma concrete division's five-acre yard in Edmonton, which supplies "whatever contractors need for on-site concrete forming and shoring." Building a structure from wet concrete is "like baking a layer cake," he explains. "We provide the supporting equipment for floor and walls, the concrete's poured and hardens, then we move up to the next level."

Traditional formwork is done using timber and plywood, but Aluma specializes in prefabricated formwork systems with metal frames. These are engineered for a site's specific needs and have several significant advantages over wood: they allow for faster construction, are more durable and have a lower life-cycle cost. An impressive unit that's remained Aluma's leading truss system for more than 30 years is an aluminum beam called the flying form truss. Pioneered in 1972, Aluma's first year of operation, the flying truss "changed the face of the industry," says Hill. Its lighter weight allows builders to move panels four times larger than previously possible.

Recent examples of projects constructed with Aluma concrete formwork are Calgary's Olympic skating oval, Anthony Henday Drive's bridges and overpasses, and many University of Alberta buildings. To see some of those flying trusses in action, head to the Edmonton Clinic North or Edmonton Clinic South at the U of A, where the "layer-cake" process is still underway.