

Agricultural Project 2010



## Belle Plaine Grain Bin

### **Project description**

This grain bin project uses alternative cementious materials in new applications and also, a shift in the rural agricultural markets' commitment to the environment. It involved high replacement with slag and fly ash which ensured the strength and durability of the bin but also the reduction in heat stress on the mat footing.

# **Project dates** 09/10

### Special project challenges

The biggest challenge was educating the owner who had requested a straight 6.5 bag mix. We described the benefits of going with a high replacement, ternary mix to reduce the heat of hydration in the think footing slab as the negative impact of using 6.5 bags of cement on the environment. Although the owner was concerned about durability and strength when using high percentages of replacement, we were able to show him test results that assured him the ternary mix was the best application for his bin. We also showed him how he'd save money. The owner was pleased that he could do his part to reduce carbon emissions.

#### Team

Contractor: VM Masonry

Owner: Val Miller

Ready Mix supplier: Aggregate Industries

For more project information, contact Scott Schaffler, Aggregate Industries, at scott.schaffler@aggregate-us.com