



Are you inadvertently specifying expensive concrete with high embodied carbon content for you clients?

Minnesota ready mixed concrete producers have seen an increased number of exterior concrete specifications which specify zero, or unnecessarily low amounts of, surface pop-outs.

Did you know?

- Surface pop-outs are the result of certain types of particles found in Minnesota's glacial gravels
- Pop-outs rarely present a threat to long-term performance of exterior concrete
- Pop-outs tend to be an issue of aesthetics rather than of performance
- Proper finishing practices AND adequate curing will eliminate the majority of pop-outs

Did you also know?

- In an effort to meet zero tolerance specifications, producers are sourcing aggregates from greater distances, resulting in...
 - Increased project costs
 - Higher embodied carbon for concrete and asphalt products
- The end user also sees higher costs plus...
 - Additional greenhouse gas emissions
 - Higher vehicle miles traveled (VMT) on Minnesota's roads and bridges

Remember the following when you specify exterior concrete:

- Proper finishing practices, curing, and sealing are critically important to obtaining a quality surface on exterior concrete
 - ARM of Minnesota provides resources (www.armofmn.com/bulletins) that address these topics and more
- Be sure to understand your client's needs and expectations
- Could you be specifying a more affordable and greener concrete solution on your next project?

For more details, contact your local concrete producer or ARM of Minnesota (www.armofmn.com)