

OPSS 760 – Construction Specification for Noise Barrier Systems

Date: April 2026

Comments received by TCP:

Comment ID	Organization	TCP Comment	MTO Response
486	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p>760.05.07</p> <p>Comment: Noise barrier walls will now require to follow the new OPSS 1355 specification (which appears to be mainly requirements from OPSS 909). Precast noise barriers were always cured according to CSA A23.4 (no wet cure), however this change will now require a 4 day wet cure among many other things for all sound barrier walls. Currently no precast facility will be able to comply with based on the volume of these walls that is produced without a massive capital investment as well as massive increase to operations to be able to do this. There are decades of sound walls installed throughout the province by many different suppliers with no known issues that we are aware of.</p> <p>Proposed change:</p>	<p>Based on comments received from industry, and MTO's review of the noise barrier production at a number of noise barrier plants, MTO has decided to exempt noise barrier from the moist curing requirements of OPSS 1355, and to continue to rely on the DSM process to assess adequacy of curing on a product-specific basis. Curing will remain unchanged for noise barrier in this specification update.</p>

		<p>Precast concrete noise barriers shall be according to OPSS 1355 with the following addition: a) The minimum 28-Day compressive strength shall be 30 MPa, or greater when specified in the Contract Documents. b) Curing of noise barriers shall follow the CSA A23.4 requirements for basic curing. Traffic barrier used as part of the noise barrier system, shall be according to the requirements for concrete barrier specified in OPSS 740.</p>	
492	Stubbe's Precast	<p>Composite sound barrier wall panels have been successfully produced and installed for decades without the need for wet curing. The recent change in Clause 760.05.07, referencing the new OPSS 1355 requirement, introduces a mandatory wet cure process that is not compatible with these products.</p> <p>Sound absorptive panels are inherently porous. Applying a wet cure to such materials causes water to accumulate within the surface pores and migrate through the panel, resulting in dripping and the removal of fresh cement paste from the absorptive layer. This will most likely compromise the acoustic performance and durability of the product.</p>	Please see response to comment 486 above.

		<p>If this wet curing requirement is enforced, the production of sound absorptive composite barrier walls for Ministry projects will no longer be feasible or practical. We therefore request that an exemption be maintained for these elements or that curing of these elements be completed as per CSA A23.4 as has been done for the last several decades.</p>	
<p>494</p>	<p>V-ROD/ Pultrall Inc.</p>	<ul style="list-style-type: none"> - Noise barriers are an excellent application for GFRP reinforcing where they can utilize the substantially higher tensile capacity (<1000MPa), higher bond strength (11 to 17MPa depending on bar diameter), completely non-corrosive properties as well as conductivity concerns for transit corridors etc. - Cost savings compared to any specialty steel reinforcing - In terms of Carbon footprint and Life Cycle Costing, production of GFRP requires much less energy than steel...approximately 90% less environmental impact per ton compared to steel. Producing 1 kilogram of GFRP requires about 3.1 MJ of energy, while steel requires 18 MJ. Its corrosion resistance leads to longer-lasting structures, which 	<p>OPSS 1355 includes requirements for GFRP, however, if a DSM noise barrier supplier wishes to use GFRP, a new DSM submission and assessment is required. MTO's Highway Design Office should be consulted for any new DSM submission.</p>

		<p>reduces the need for demolition, replacement, and new construction over time, thereby lowering overall carbon emissions. A FDOT LCA of Halls River bridge show GFRP bars produce 25.17% less CO2 emissions compared to steel at the product stage.</p> <p>- Lightweight benefits with GFRP being 1/4 the weight of steel. This weight reduction leads to substantial CO2 savings, ranging from 77% to 85% in some scenarios, when comparing a complete project using GFRP versus steel. Its lighter weight means lower CO2 emissions during transportation, 25.51% less according to the Halls River bridge study.</p>	
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Comments received by email:

Date	Organization	Email Comment	MTO Response
		No comments received by email.	