

**OPSS 1355 – Material Specification for Precast Concrete – Materials and Production**

**Date:** April 2026

**Comments received by TCP:**

Comment ID	Organization	TCP Comment	MTO Response
479-1	Decast Ltd.	<p><b>1355.04.02.06 Welding</b></p> <p><b>Comment:</b> Resistance welding is not currently defined in the specification. Requiring a proposal for approval on every project where resistance welding is typically used creates unnecessary effort for both the precaster and the Contract Administrator. If the process meets established specifications and standards, it should be accepted without repeated approvals. A recent example: a standard resistance welding proposal was rejected on a product where it had been previously used and approved on numerous MTO projects. This inconsistency disrupts production practices, complicates planning, and increases costs.</p> <p><b>Change request:</b> We respectfully and kindly request that resistance welding be formally defined within the specification. Precasters should be allowed to submit an annual proposal</p>	<p>Thank you for your comment. Resistance welding requirements will be revised in OPSS 905 and MTO is working to publish an SP to 905 to address your concern.</p> <p><b><u>Follow-up to Dec. 12, 2025 meeting:</u></b></p> <p><u>The SP to 905 is being finalised and will allow welding, this SP will be published as soon as it is finalised</u></p> <p><b><u>Follow-up to Feb 11, 2026 meeting:</u></b></p> <p><u>MTO’s Structures Office has consulted with stakeholders on the draft special provision to OPSS 905 and is currently considering including some provisions in standards related to welding.</u></p>

		and test results directly to MTO for approval, similar to the process used for SCC, rather than requiring approval on every project.	
479-2	Decast Ltd.	<p><b>1355.04.02.02 Certification of Precast Plant</b></p> <p><b>Comment:</b> The requirement to submit detailed audit reports is concerning. Such reports are proprietary and confidential between the auditing body and the precaster. CPCQA and CSA are well-established, rigorous certification programs; a plant is either certified or it is not. Requiring full audit reports goes beyond the intent of certification and may compromise the integrity and independence of the process.</p> <p><b>Change request:</b> We respectfully request that confirmation of current certification status be accepted as the appropriate measure of compliance. This approach ensures transparency for the Ministry while maintaining the credibility and integrity of the certification framework. The current OPSS 1355 wording was originally introduced in OPSS.PROV 909 (2016, Section 909.04.02.03). We recommend adapting the wording from OPSS.PROV 912 (Section 912.04.02.03), as it appears MTO has already transitioned to this more</p>	<p>There is a provision in the specification for audit reports to be submitted to the Owner upon request. The ministry specifies certification of precast plants by CSA or CPCQA. If these inspections reveal problems, identified in the audit reports, this information should be available to the ministry. It is important that the ministry be aware of any serious quality issues impacting precast elements that may be incorporated into highway structures used by the public.</p> <p>The comment stated that the OPSS 912 wording is preferable, however it is the same as the wording in OPSS 1355.</p> <p><b><u>Follow-up to Feb 11, 2026 meeting:</u></b></p> <p><b><u>MTO has reviewed and agrees to the request to remove the requirement to provide certification audit reports. MTO will address any quality problems through rejection of any deficient material. The requirement to provide precast plant certification</u></b></p>

		<p>applicable language. The OPSS 912 wording is better aligned with both CSA requirements and CPCQA certification rules and regulations.</p>	<p><u>audit reports, upon request, has been removed from the specification.</u></p>
479-3	Decast Ltd.	<p><b>1355.05.03 Associated Hardware</b></p> <p><b>Comment:</b> The clause appears unclear and potentially contradictory.</p> <p>The former Clause 909.05.07 (removed from OPSS.PROV 909, Nov 2016) explicitly permitted black steel hold-down devices, provided portions within 40 mm of the concrete surface were chromate-coated over electro-deposited zinc (ASTM B633).</p> <p>The current wording does not confirm whether black steel remains permissible for hardware located beyond 40 mm from the concrete surface, as was previously allowed</p> <p><b>Change request:</b> We respectfully and kindly request that the clause be revised to clearly state whether hardware (e.g., hold-down devices) located more than 40 mm from the concrete surface may continue to be fabricated from black steel, consistent with the former provision.</p>	<p>The clause has been revised to clarify that the requirement is explicitly for hold down devices.</p>

479-4	Decast Ltd.	<p><b>1355.05.11 Concrete Sealers Proprietary Patching Materials</b></p> <p><b>Comment:</b> Lists of acceptable concrete sealers and proprietary patching materials are not always available at the time of tender. Precasters must stock and invest in these products prior to contract award. When lists are not transparent or products are later removed, it results in financial loss for precasters.</p> <p><b>Change request:</b> We respectfully and kindly request that these lists be published on DSM at the time of tender. Posting them in the same manner as other DSM lists ensures openness, transparency, and consistency for all parties.</p>	<p>MTO is in the process of publishing the following lists on the MTO Technical Publications site:</p> <ul style="list-style-type: none"> <li>a) Ministry's List of Concrete Patching Materials – Filling Core Holes</li> <li>b) Ministry's List of Concrete Patching Materials – Form and Pump</li> </ul> <p>Due to the various restrictions with the use of sealers, the sealer list will remain a list that is provided when used. It is obtained from the Contract Administrator.</p>
479-5	Decast Ltd.	<p><b>1355.07.05.02 Welding</b></p> <p><b>Comment:</b> No issue with this statement. The approval process shall be transferred from CA to the MTO Structural or Reinforcement Section</p> <p><b>Change request:</b> Precasters should be allowed to submit an annual proposal and test results directly to MTO for approval, similar to the process</p>	<p>Please see response to comment 479-1 above.</p>

		used for SCC, rather than requiring approval on every project.	
479-6	Decast Ltd.	<p><b>1355.07.10.02 Concrete Placing Restrictions</b></p> <p><b>Comment:</b> The new clause in OPSS 1355 is more restrictive than the former OPSS.PROV 909, Clause 909.07.08.02. It requires the temperature of formwork, reinforcement, and other materials to be maintained between 5 °C and 30 °C for each element. The previous clause allowed an average of up to 30 °C, no individual reading above 35 °C, and a maximum 10 °C variation, which was more practical for large elements. The new requirement is too strict and poses implementation challenges in practice.</p> <p><b>Change request:</b> We respectfully and kindly request that the clause be revised to reflect the practical and effective approach of the former provision.</p> <p>Allowing the average temperature method ensures feasibility for large elements while still maintaining quality and compliance.</p>	<p>This change for girders has been made to streamline the requirements for precast.</p> <p>This temperature applies only to the formwork, the size of the element would not impact the measured temperature.</p> <p><u><b>Follow-up to Dec. 12, 2025 meeting:</b></u> <u>Agree to reinstate original requirement for girders only.</u></p>
479-7	Decast Ltd.	<p><b>1355.07.10.04 b) i. Concrete Finishing</b></p> <p><b>Comment:</b></p>	<p><del>Change was made to remove ambiguity about whether abrasive blast cleaning of the top surface is required and to ensure consistency of</del></p>

		<p>Tops of girders are intentionally roughened (~5 mm amplitude) to promote bond; full abrasive blasting can smooth this profile and reduce bond.</p> <p>Blast media can lodge in the roughened surface, further impairing bond with new concrete.</p> <p>The previous OPSS.PROV 909.07.10 approach required blasting only where laitance exists, which targeted the problem without harming the prepared surface.</p> <p>Full-surface blasting adds cost, time, and winter constructability challenges (snow/ice on girder tops) with no demonstrated quality benefit.</p> <p><b>Change request:</b> We formally and kindly request that the clause be revised to limit abrasive blast cleaning to areas where laitance is present only.</p> <p>Reaffirm that an intentionally roughened top surface (~5 mm amplitude) without laitance remains acceptable as-is.</p> <p>Maintain alignment with the former OPSS.PROV 909 provision for clarity and consistency.</p>	<p><del>the preparation of the surface of concrete against which cast-in-place concrete will be placed.</del></p> <p><b><u>Follow-up to Feb. 11, 2026 meeting:</u></b></p> <p><u>MTO has reviewed this requirement and, as requested, agrees to remove the requirement to abrasive blast clean the tops of girders at the precast plant, and will modify OPSS 904 to clarify requirements for abrasive blast cleaning of the tops of girders on site.</u></p>
--	--	---	---

		<p>Avoid unnecessary risks of reducing bond quality caused by overblasting.</p> <p>Prevent added complications during winter conditions (e.g., snow on girder tops).</p>	
479-8	Decast Ltd.	<p><b>1355.07.11.03</b></p> <p><b>Comment:</b> The 24-hour form removal requirement creates a significant burden for precasters without weekend shifts.</p> <p>This restriction prevents Friday casting and could result in the loss of up to 48 production days annually.</p> <p>The intent appears to be ensuring a minimum 96-hour moist-curing cycle, given these elements' exposure to chlorides during service.</p> <p><b>Change request:</b> We respectfully and kindly request that the clause be revised to focus on the requirement for a full four-day moist cure, rather than form removal timing.</p> <p>Suggested wording: "Bridge deck elements and MSE elements shall not be left in the formwork for longer than 4 days, followed by at least 48 hours of moist curing as specified above."</p>	<p><b><u>Follow-up to Dec. 12, 2025 meeting:</u></b></p> <p><u>The requirement to remove formwork after 24 hours has been removed for MSE (to be consistent with current specification for MSE).</u></p> <p><u>No change to the specification for bridge deck elements.</u> This is a current requirement for bridge elements <del>and MSE</del>, not a new requirement. This is consistent with the requirements for cast-in-place concrete.</p>

479-9	Decast Ltd.	<p><b>1355.07.13.03 Temperature Monitoring Records</b></p> <p><b>Comment:</b> Form PH-CC-117 is identified as a cold weather concreting form.</p> <p>This form is not applicable to precasters who produce indoors under controlled conditions.</p> <p>Many precasters now use digital temperature monitoring systems, making this form redundant in such cases.</p> <p><b>Change request:</b> We respectfully and kindly request that PH-CC-117 be revised to clarify its applicability, or exempt precasters who operate indoors with digital temperature monitoring systems.</p>	<p>PH-CC-117 form has been updated to be a Concrete Temperature Record form, not just for cold weather, and will be published.</p> <p><b><u>Follow-up to Dec 12, 2025 meeting:</u></b></p> <p><b><u>MTO has reviewed this requirement, no change will be made to the specification.</u></b></p>
479-10	Decast Ltd.	<p><b>1355.07.18.02 Exposed Surfaces</b></p> <p><b>Comment:</b> The current MTO-approved list of proprietary patching materials does not include products capable of achieving both uniform colour and consistent appearance.</p>	<p>MTO does not control which products are submitted for listing on the PPM list. MTO will review any patching products, submitted by manufacturers, that meet the acceptance criteria.</p> <p><b><u>Follow-up to Dec 12, 2025 meeting:</u></b></p>

		<p>This creates challenges for precasters in meeting both performance and aesthetic requirements</p> <p><b>Change request:</b> We respectfully and kindly request that the approved list be expanded to include materials that provide improved colour and appearance uniformity, while still meeting durability and performance standards.</p>	<p><u>MTO has reviewed this requirement, no change will be made to the specification.</u></p>
479-11	Decast Ltd.	<p><b>1355.07.27 Delivery</b></p> <p><b>Comment:</b> Not all precasters provide unloading services and therefore, unloading instructions, as this is typically the responsibility of the contractor at site.</p> <p>Including unloading in the precaster's scope creates uncertainty and potential liability beyond the precaster's control</p> <p><b>Change request:</b> We respectfully and kindly request that "unloading" be removed from the scope of the precaster in this clause, limiting responsibility to transportation, lifting, and loading only. Unless, agreed otherwise on the contract</p>	<p>OPSS 1355 forms part of the contract with the Contractor, as defined in OPSS 100. All requirements are the responsibility of the contractor, regardless of which specification they are in.</p>
479-12	Decast Ltd.	<p><b>1355.08.03.02 Referee Testing</b></p> <p><b>Comment:</b></p>	<p>MTO has a contract with the Contractor, as defined in OPSS 100. The Contractor is responsible for all</p>

		<p>The current sentence is ambiguous as written. Without clarification, it is not clear who is responsible for making the decision.</p> <p>The manufacturer is the appropriate body responsible in this context.</p> <p><b>Change request:</b> We respectfully and kindly request that the phrase “to the manufacturer” be added at the end of the sentence to remove ambiguity and ensure clear assignment of responsibility.</p>	<p>decisions, including whether to invoke referee testing.</p>
479-13	Decast Ltd.	<p><b>1355.08.05.04.01 General</b></p> <p><b>Comment:</b></p> <p>The current sentence is ambiguous as written.</p> <p>Without clarification, it is not clear who is responsible for making the decision.</p> <p>The manufacturer is the appropriate body responsible in this context</p> <p><b>Change request:</b> We respectfully and kindly request that the phrase “to the manufacturer” be added at the end of the sentence to remove ambiguity and ensure clear assignment of responsibility.</p>	<p>MTO has a contract with the Contractor, as defined in OPSS 100. The Contractor is responsible for all decisions, including whether to invoke referee testing.</p>

479-14	Decast Ltd.	<p><b>1355.08.11.02 c) Defects and Deficiencies Causing Rejection</b></p> <p><b>Comment:</b></p> <p>Clause 1355.08.11.02(c), applicable to girders, is more punitive than the former OPSS.PROV 909 provision.</p> <p>The original 909 clause limited rejection to honeycombing, voids, cavities, spalls, or delaminations within a bearing surface area, defined as the contact area of the bearing plus 30 mm on all sides (except when the bearing area is fully encased in concrete).</p> <p>The new clause in OPSS 1355 specifies that any spall not covered by Table 4 for standard repairs results in rejection, which is overly harsh and does not reflect practical conditions.</p> <p><b>Change request:</b></p> <p>We respectfully and kindly request that the clause be revised to align with the previous OPSS.PROV 909 approach, limiting rejection to defects within 30 mm of the bearing area for girders.</p> <p>This maintains practicality, fairness, and consistency with established standards while still addressing structural concerns.</p>	<p>The limitation on repairs to bearing areas of girders remains a requirement, see note 2 of Table 4 of OPSS 1355.</p> <p>It was implied that if not repairable by standard methods, the elements are rejectable, and a repair proposal is required. This has now been made clear with the addition of 1355.08.11.02(c).</p>
--------	-------------	--	---

479-15	Decast Ltd.	<p><b>1355.08.11.03 All Other Defects and Deficiencies</b></p> <p><b>Comment:</b> The draft clearly distinguishes between cold joints and pour lines:</p> <p>Cold joints occur when fresh concrete is placed against a surface that has already set, leading to weak bonding and potential durability issues.</p> <p>Pour lines occur when sequential placements of workable mixes bond properly; they are visible but structurally monolithic.</p> <p>Industry practice and CSA A23.4 recognize this distinction. Pour lines, when properly bonded, do not compromise strength or durability.</p> <p>Treating pour lines as NCR-worthy defects creates unnecessary administrative burden, production inefficiencies, and misclassifications without any improvement in safety or performance.</p> <p><b>Change request:</b> Remove “pour lines” from the list of defects requiring an NCR.</p>	Agree, bullet g, presence of pour lines, has been removed.
--------	-------------	---	--

479-16	Decast Ltd.	<p><b>Table 3</b> Concrete and Ambient Temperature Measurements</p> <p>Bridge Elements</p> <p><b>Comment:</b></p> <p>The table requires surface temperature measurements for all bridge elements.</p> <p>Previously, SSP 999S31 Clause 7.01.16.02 only required a surface probe for elements greater than 200 mm thick.</p> <p>As written, the table would require partial-depth deck panels (90–110 mm thick) to have both a core and surface probe in each element.</p> <p>This is unnecessary for elements of that thickness and does not align with past requirements.</p> <p><b>Change request:</b> We respectfully and kindly request clarification on the intent of the surface temperature measurement requirement for bridge elements.</p> <p>Specifically, please confirm whether the requirement is intended to apply to all elements, or only to those greater than</p>	<p>Agree, added the following note to Table 3 of OPSS 1355:</p> <p>D. Surface temperature is not required for elements with a thickness less than or equal to 200 mm.</p>
--------	-------------	---	---

		<p>200 mm thick, consistent with the former provision.</p>	
<p>479-17</p>	<p>Decast Ltd.</p>	<p><b>Table 4</b>            Defects and Deficiencies Repairable by Standard Methods</p> <p>Bugholes</p> <p><b>Comment:</b>            The requirement to fill bugholes within 3 days of form removal presents challenges because:</p> <p>It typically falls within the curing period of the product.</p> <p>For curing methods such as water immersion or continuous water application, early filling could conflict with manufacturer’s instructions for proprietary patching materials.</p> <p>It would require filling during the exposure period, which may not provide sufficient time to complete the operation.</p> <p>It is not feasible for silica fume concrete, which requires moist curing throughout the entire exposure period</p> <p><b>Change request:</b></p>	<p>Agree, requirement to fill bugholes within 3 days is removed.</p>

		<p>We respectfully and kindly request that the clause be revised to allow bughole filling after curing is complete.</p> <p>This ensures compatibility with curing requirements, proprietary patching instructions, and maintains product durability and quality.</p>	
479-18	Decast Ltd.	<p><b>Table 4</b> Defects and Deficiencies Repairable by Standard Methods</p> <p>Cracks</p> <p><b>Comment:</b> The new clause states: “All elements except for girders: For width of crack &lt; 0.30 mm: Apply a concrete sealer to the entire element, except areas against which new concrete is to be placed or areas in contact with bearings, if applicable.”</p> <p>As written, this requires sealing the entire element, which is excessive when addressing a localized crack.</p> <p>OPSS.MUNI 941 (Nov 2019), Table 1, provided a more practical and targeted approach, requiring sealing only the cracked areas with a sealer acceptable to the Owner.</p>	<p>If sealer is applied, it should be applied to the entire element (all faces) to ensure consistency of performance and durability. If sealer is applied to small areas, these areas are prone to accelerated deterioration.</p> <p><b><u>Follow-up to Dec 12, 2025 meeting:</u></b></p> <p><b><u>MTO has reviewed this requirement, no change will be made to the specification.</u></b></p>

		<p><b>Change request:</b> All elements except for girders: For width of crack &lt; 0.30 mm: Apply sealer acceptable to the Owner to the cracked areas.</p> <p>This ensures repairs are effective, efficient, and consistent without imposing unnecessary sealing on unaffected portions of the element.</p>	
479-19	Decast Ltd.	<p><b>Table 4</b> Defects and Deficiencies Repairable by Standard Methods</p> <p>Low Cover</p> <p><b>Comment:</b> 1. The clause states: “Low cover readings between –5 mm and –0 mm of the specified cover, except girder soffits between bearing cutouts.”</p> <p>1.1 The tolerance expressed as “–0 mm” appears to be an error.</p> <p>1.2 If taken literally, any value less than the specified cover would trigger a sealing requirement, which does not appear to be the intent.</p> <p>2. The clause also states: “Where sealing of a visible element is required all elements of the component or structure</p>	<p>Thank you for noting this, it is a typo, the “1” was accidentally deleted. It has been corrected to say “Low cover readings between - 5 mm and -10 mm of the specified cover...”</p> <p>Sealing only applies to girders in the same line.</p>

		<p>shall be sealed for consistency of appearance.”</p> <p>2.1 It appears the intent was for MSE walls or products that the discoloration between sealed concrete and non sealed would not be aesthetically pleasant. However,</p> <p>2.2 As written, if taken literally, this would require sealing all girders in a structure if a single low cover is found, since girders are classified as visible elements.</p> <p>IMPORTNAT NOTE: MTO’s approved sealers (e.g., Sikagard® H 1000) do not alter appearance, making full-structure sealing unnecessary.</p> <p><b>Change request:</b> We respectfully and kindly request that the tolerance be corrected to “-10 mm” to avoid unintended sealing requirements.</p> <p>We further request for girder elements that the sealing requirement be revised to match the former OPSS.PROV 909 wording, limiting sealing to exterior girders in the same line, which is more practical and avoids unnecessary work.</p>	
479-20	Decast Ltd.	<p><b>Table 5</b> Dimensional Tolerance for Girders</p>	<p>Precasters are free to make any QC measurements at the plant.</p>

		<p><b>Comment:</b> The table no longer includes cover and camber measurements/tolerances.</p> <p>While camber is still addressed in OPSS.PROV 909 (Nov 2025), the girder fabricator is not always the same subcontractor responsible for installation.</p> <p>Without verification at the precast stage, there is a risk that compliance may only be identified at installation, creating unnecessary complications.</p> <p><b>Change request:</b> We respectfully and kindly request that camber requirements be reinstated in OPSS.PROV 1355, to ensure they are verified prior to installation and compliance is consistently maintained.</p>	<p>Final camber QA requirements are specified only in OPSS 909.</p>
479-21	Decast Ltd.	<p><b>Table 7</b> Note 2</p> <p><b>Comment:</b> No reference to Note 2 in the table.</p>	<p>Thank you for noting the typo, it is corrected.</p>
479-22	Decast Ltd.	<p><b>Table 8</b> Bridge Elements</p> <p><b>Comment:</b> The requirement for six (6) cores per lot for deck panels, with up to three different diameters, is concerning.</p>	<p>MTO policy is to base acceptance on cores, obtained from concrete components, which reflect both the material and construction quality.</p> <p>Please see response to comment 479-10 above.</p>

		<p>In-situ compressive strength testing by coring provides little added value compared to cylinder testing, while introducing:</p> <p>Significant effort and cost,</p> <p>Damage to the product and visible patching (“swiss-cheese” effect),</p> <p>Aesthetic deficiencies, since current MTO-approved patching materials do not adequately match the colour of native mixes,</p> <p>Durability risks, as exposed patches in critical bridge deck regions may reduce long-term performance.</p> <p><b>Change request:</b> We respectfully and kindly request that compressive strength be verified through standard cylinder testing rather than coring.</p> <p>This approach is more reliable, less damaging, cost-effective, and better preserves both the durability and appearance of deck panels.</p>	
480-1	Fraser Mitchell of Geoquest Canada	<p><b>OPSS 1355.05.03</b></p> <p><b>Proposed update/modification:</b></p>	Zinc plating is only allowed for hold down devices for precast girders. All other hardware must be non-metallic

		<p>Associated hardware shall be according OPSS 905. All hardware shall be non-corroding or be galvanized according to ASTM A153 <b>or ASTM A123</b>.</p> <p>With the exception of hot-dipped galvanized components according to ASTM A123, surfaces of hardware located within 40 mm of the concrete surface shall be chromate coated over an electro-deposited coating of zinc according to ASTM B633.</p> <p><b>Comment:</b> Components with a hot-dipped galvanized coating according to the requirements of ASTM A123 are superior in corrosion resistance compared to zinc plated.</p>	<p>or galvanized. This clause has been clarified in the specification.</p>
480-2	Fraser Mitchell of Geoquest Canada	<p><b>OPSS 1355.07.11.03</b></p> <p><b>Proposed update/modification:</b> Formwork shall be removed from bridge deck elements and MSE elements within <b>72</b> hours of concrete placement and all surfaces previously covered by forms shall be immediately moist cured as specified above for the remainder of the specified curing period</p> <p><b>Comment:</b> Removing forms withing 24 hours for MSE panels eliminates the ability to cast on Fridays. This will have an impact on cost</p>	<p><b><u>Follow-up to Dec. 12, 2025 meeting:</u></b></p> <p><del>Please see response to comment 479-8 above.</del> <u>Agree, the requirement to remove formwork after 24 hours has been removed for MSE (to be consistent with current specification for MSE).</u></p>

		due to downtime and overall production lead times	
480-3	Fraser Mitchell of Geoquest Canada	<p><b>OPSS 1355.07.11.04 c)</b></p> <p><b>Proposed update/modification:</b>            Replace bullets i and ii with:            i. Photographs shall be taken every 24 hours for the curing period. With the exception of Friday production which shall be photographed immediately upon the next business day.</p> <p><b>Comment:</b>            Removal of initial curing at 8 hour intervals is not possible. The precast plant is not open 24 hours per day. The plant is not open on the weekends so photos would need to be taken immediately at the opening on the next business day.</p>	<p>This is a longstanding requirement to ensure that moist curing is monitored and documented.</p> <p><b><u>Follow-up to Dec 12, 2025 meeting:</u></b></p> <p><b><u>MTO has reviewed this requirement, no change will be made to the specification.</u></b></p>
480-4	Fraser Mitchell of Geoquest Canada	<p><b>OPSS 1355.08.04.03, 1355.08.05.06, 1355.08.06.03</b></p> <p><b>Proposed update/modification:</b>            Price = Contract price for the tender item <b>with the exception of MSE panels. Price for MSE panels shall be 40% of the contract price for the tender item.</b></p> <p><b>Comment:</b>            With the current calculation method, the MSE system as a whole is penalized</p>	<p>MTO previously made a significant change to the specification for MSE wall by separating the item into fabrication, delivery and installation, and applied any concrete penalties to only the fabrication item.</p>

		including soil reinforcement and wall components. Additionally, the MSE supplier has no control over any mark-up placed on the supply by the general contractor creating unknown risk.	
480-5	Shahriar Mirmirani of Geoquest Canada	<p><b>OPSS 1355.02</b></p> <p><b>Proposed update/modification:</b> add: ASTM A123/A123M-24 Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products</p> <p><b>Comment:</b> ASTM A153 may not be applicable to some embeded hardware such as RECo tie-strips.</p>	This is the current requirement in SSP 599S23, no change to the specification is required.
483-6	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>Publication Date</b></p> <p><b>Comment:</b> The proposed November 2025 publication date/version does not seem appropriate given the magnitude of changes and the wide range of products and stakeholders impacted by this new catch-all material and production specification. A change of this scale requires a thorough review and cross-referencing with previous specifications to fully identify all revisions and their potential impacts. It is recommended that MTO schedule an industry stakeholder meeting to review all comments prior to publication.</p>	MTO has postponed publication to April 2026.

		<b>Proposed change:</b> TBD 2025	
483-1	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<b>Title</b> <b>Comment:</b> Typo: Matieral	Thank you for noting the typo.
483-2	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<b>1355.03</b> <b>Comment:</b> Need a definition for Hot weather concreting where evaporation rates are high and/or ambient temperatures are high.	MTO does not include a definition for Hot Weather Concrete, but rather we rely on temperature requirements for the concrete and placement.
483-3	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<b>1355.03</b> <b>Comment:</b> Wet cast refers to only vibrated concrete, SCC is allowed based on approval on project basis, which it would not fit this definition.  <b>Proposed change:</b> Wet Cast Concrete means concrete with a measurable slump at the time of placing; <del>that is consolidated by vibration.</del>	This specification does not cover SCC. When use of SCC is proposed, the NSSP for SCC governs and clearly specifies that vibration is not required.  <b><u>Follow-up to Dec 12, 2025 meeting:</u></b>  <u>1355.07.10.03, Consolidation subsection states: The requirements of this clause do not apply to self-consolidating concrete (SCC), when accepted for use by the Owner.</u>

			<p><u>It is not necessary to change the definition, as this definition does not apply to SCC, if accepted for use. The NSSP for SCC would govern.</u></p> <p><u>However, MTO does not object to making the requested change; 1355 has been revised to state: <b>Wet Cast Concrete</b> means concrete with a measurable slump at the time of placing.</u></p>
483-4	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.03</b></p> <p><b>Comment:</b> Pour line definition needs to be more clearly defined. Non-structural and cosmetic should be added to the definition.</p> <p><b>Proposed change:</b> 08.11.03. Any individual elements having one or more of the defects and deficiencies listed below shall be deemed unacceptable and shall be repaired: <del>g)</del> <del>There is the presence of pour lines;</del></p>	Please see response to comment 479-15 above.
483-5	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON	<p><b>1355.04.02.02</b></p> <p><b>Comment:</b> Industry does not support this requirement. Audit reports contain confidential and sensitive company-</p>	Please see response to comment 479-2 above.

	<p>member producers)</p>	<p>specific information. No one else has access to these reports aside from the assigned auditor and the company representative. Aside from the specific requirements that companies are being audited for, there is significant amount of feedback provided for improvements. Each plant makes significant investments in technology, R&amp;D etc. to improve their production and performance. Sharing these reports with third parties creates an unnecessary situation for potential mishandling of these reports legal disputes between involved parties, unless the ministry wishes to be legally responsible for non-disclosure. Considering MTO still conducts its own inspections with retainers, and based on recent industry-ministry follow-ups it was our understanding that the purpose of general audits is mainly plant certification assurance for the ministry. This is definitely an overlap and clearly undermines all existing certification programs that ministry endorses in the first place.</p> <p><b>Proposed change:</b> Delete the following from clause 1355.04.02.02: <del>Copies of the precast plant certification audit reports of the Canadian Precast Concrete Quality Assurance Program (CPCQA), Canadian Standards</del></p>	
--	--------------------------	--	--

		<del>Association (CSA), or both as applicable, and related documentation, shall be submitted to the Owner upon request.</del>	
483-6	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.04.02.05</b></p> <p><b>Comment:</b> 14 days notification prior to commencement of fabrication is too long. This should be reduced to 7 days as previously specified in OPSS.PROV 909 Nov 2016 CI 909.07.01 for girders. It is also recommended that a notification table be created for different products where more or less than 7 days are required.</p> <p><b>Proposed change:</b> The Contract Administrator shall be notified in writing at least <b>7 Days</b> prior to commencement of fabrication and the fabrication schedule shall be submitted. Any changes in the fabrication schedule shall be provided to the Contract Administrator in writing.</p>	<p>This change was made based on input from Quality Assurance staff. The requirement of 14 days applies to all precast products; the requirement is consistent.</p> <p><b><u>Follow-up to Dec 12, 2025 meeting:</u></b></p> <p><u>MTO has discussed with the regional QA Sections and 14 days is needed to make arrangements for various tasks.</u></p> <p><b><u>Follow-up to Feb 11, 2026 meeting:</u></b></p> <p><u>MTO has reviewed and consulted internally regarding this requirement. The requirement for 14 days notification for concrete placement is needed to ensure enough time for MTO to arrange for various tasks.</u></p>
483-7	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.04.02.06</b></p> <p><b>Comment:</b> Resistance welding should be defined. Requiring a proposal for approval to use resistance welding on every project that has product where it is typically used adds unnecessary effort for both the Precaster and the Contract Administrator. If the</p>	<p>Please see response to comment 479-1 above.</p>

		<p>process meets the specifications and standards it should be accepted without repeated approvals. Inconsistency in approvals disrupts standard production practices, complicates planning, and ultimately drives up costs. It's recommended that Precasters can submit an annual proposal and test results directly to MTO for approval. Similar to SCC.</p> <p><b>Proposed change:</b> Define resistance welding as a manufacturing process that a manufacturer can get qualified and unless changes are made there should be no need for repeated approvals.</p>	
483-8	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.05.03</b></p> <p><b>Comment:</b> c) When salt scaling resistance is specified for acceptance, loss of surface mass due to scaling when tested according to LS-412 shall not exceed 0.8 kg/m<sup>2</sup>.. Is this requirement for precast only? OPSS 1350 does not have this requirement.</p> <p><b>Proposed change:</b> More clarity is required on this item.</p>	<p>This requirement in OPSS 1355 is for precast concrete.</p> <p>Not all precast components specify salt scaling as an acceptance requirement.</p> <p>Table 8 of OPSS 1355 shows which components require salt scaling testing for acceptance (i.e. MSE, concrete barrier).</p>
483-9	Individual -	<b>1355.05.03</b>	

	<p>Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)</p>	<p><b>Comment:</b> Clarify to say 'exposed concrete surface'. Further, The former Clause 909.05.07 (removed from OPSS.PROV 909, Nov 2016) specifically permitted hold-down devices to be fabricated from black steel, provided that any portion located within 40 mm of the concrete surface was chromate coated over an electro-deposited zinc coating (ASTM B633). The current wording does not explicitly allow black steel for hardware located beyond 40 mm from the concrete surface, which was previously permitted.</p> <p><b>Proposed change:</b> Surfaces of hardware located within 40 mm of the <b>exposed concrete surface in service</b> shall be chromate coated over an electro-deposited coating of zinc according to ASTM B633. The following needs to be clarified whether hardware (such as hold-downs) located more than 40 mm from the concrete surface may still be black steel, consistent with the former provision.</p>	<p>This clause has been revised to provide clarity.</p>
<p>483-10</p>	<p>Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON</p>	<p><b>1355.05.03/04/05</b></p> <p><b>Comment:</b> Page 6 has duplicate clause # for 03, 04, 05</p>	<p>Thank you for noting the typos.</p>

	member producers)		
483-11	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.05.04 &amp; 1355.05.11</b></p> <p><b>Comment:</b> The lists of acceptable concrete sealers and proprietary patching materials should be available at the time of tender. Precasters stock these products and invest in them before award of contract. When the lists are not transparent and products are later removed, it creates financial loss. These lists should be posted in the same way as the DSM lists so they are open and consistent for all parties.</p> <p><b>Proposed change:</b> The list of acceptable materials should be available online.</p>	Please see response to comment 479-4 above.
483-12	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.07.01</b></p> <p><b>Comment:</b> The requirement for 14 days' notice prior to commencement of fabrication appears redundant with Clause 1355.04.02.05, Notification of Placement.</p> <p><b>Proposed change:</b> The Contract Administrator shall be notified in writing at least 7 Days prior to commencement of fabrication.</p>	<p>The first clause is a submission; the other clause is a construction requirement.</p> <p>Please see response to comment 483-6 above.</p>

483-13	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.07.02</b></p> <p><b>Comment:</b> The plant certification requirement was covered on 04.02.02 and 03</p> <p><b>Proposed change:</b> Delete clause.</p>	The first clause is a submission; the other clause is a construction requirement that the concrete be produced at a certified plant.
483-14	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.07.04.02</b></p> <p><b>Comment:</b> We assume this is referring to splicing within the product. Sometimes projected/exposed strands are spliced.</p> <p><b>Proposed change:</b> Strands <b>within the concrete element</b> shall not be spliced.</p>	<p><b><u>Follow-up to Dec. 12, 2025 meeting:</u></b></p> <p><del>No change will</del> <u>Proposed change has been</u> <del>be</del> made to the specification.</p>
483-15	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.07.05.02</b></p> <p><b>Comment:</b> Resistance welding approval should be removed from this clause and should be approval based on an annual submission to MTO.</p> <p><b>Proposed change:</b> Define resistance welding as a manufacturing process that a manufacturer can get qualified annually and or be listed in the DSM list and unless changes are made there should be no need for repeated approvals.</p>	Please see response to comment 479-1 above.

<p>483-16</p>	<p>Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)</p>	<p><b>1355.07.10.01</b></p> <p><b>Comment:</b> The 40 minute limit for interruptions in placing concrete is a very short window and way shorter than the actual initial set times of typical mixes measured by ASTM C191 / CSA A23.2. At 40 minutes there is no risk of a cold joint forming. This is impractical and just adds another potential roadblock for all parties, no one is going to set a timer in between each batch to see if you are within 20 min, what if it is 25 min? Since cold joints are now listed as rejectable deficiencies, the 40 minute limit could be misinterpreted as automatically causing a cold joint. Requiring remedial action proposals after this short interval could lead to unnecessary reporting and extra work for precasters. It is recommended that the time limit be increased to a period closer to the initial set so that proposals are only required when there is a real risk of a cold joint.</p> <p><b>Proposed change:</b> When there is an interruption in placing concrete greater than 20 minutes but less than 40 minutes, the two consecutive layers shall be rodded to ensure proper bonding. Any interruption in placing concrete shall not exceed the initial set</p>	<p>The 40-minute time limit is achievable and consistent with requirements for cast-in-place concrete as well as existing precast concrete requirements (e.g. OPSS 912).</p> <p><b><u>Follow-up to Dec. 12, 2025 meeting:</u></b></p> <p><u>MTO has reviewed this requirement, no change will be made to the specification. MTO will monitor contracts to assess implementation of this requirement.</u></p> <p><b><u>Follow-up to Feb 11, 2026:</u></b></p> <p><u>MTO has reviewed and, as requested, a change will be made to allow both wet burlap or rodding to be used for interruptions in concrete placement, at the Contractor's option.</u></p>
---------------	--	---	--

		time of that mix as determined by ASTM C191.	
483-17	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.07.10.01</b></p> <p><b>Comment:</b> The new clause in OPSS 1355 is stricter than the previous one in OPSS.PROV 909 which allowed the average temperature to be up to 30°C with no individual reading above 35°C and a maximum 10°C difference between highest and lowest. This method was easier to apply, especially for large elements. The new clause is too strict and will be difficult to adhere to. We recommend deferring back to previous edition of OPSS 909 909.07.08.02 Concrete Placing Restrictions.</p> <p><b>Proposed change:</b> The average temperature of the formwork, reinforcement or any other material against which concrete is to be placed shall be greater than or equal to 5°C and shall not exceed 30°C with no individual reading above 35°C and a maximum 10°C difference between the highest and lowest.</p>	Please see response to comment 479-6 above.
483-18	Individual - Comments submitted on behalf of Ontario	<p><b>1355.07.10.03 – Consolidation</b></p> <p><b>Proposed change:</b></p>	This proposed change is very prescriptive and may not apply to all mix designs/components. MTO's specification allows precasters to

	<p>precast producers (CPCI and its ON member producers)</p>	<p>Add the following: <b>Vibrators are to be inserted vertically into the concrete and slowly withdrawn to facilitate removal of entrapped air bubbles. Vibrators shall be applied in as short of a period as necessary to provide consolidation of the concrete without segregation.</b></p>	<p>consolidate as appropriate for the component being produced. MTO specifies end results; a) that the concrete not be segregated and, b) that there are no voids, to ensure that vibration is done correctly.</p>
<p>483-19</p>	<p>Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)</p>	<p><b>1355.07.10.04 a), b)</b></p> <p><b>Comments:</b></p> <p>a) The use of “and” indicates that both roughening and sandblasting are mandatory. For girder diaphragms, this changes the process from a simple sandblast to the application of surface retarder followed by sandblasting. The use of retarder would require significant investment in wash stations and runoff treatment systems, as the process is not environmentally friendly. Sandblasting after roughening would then smooth the surface, which defeats the intent of achieving a stronger bond.</p> <p>b)The previous OPSS.PROV 909 only required sandblasting of the top surface to remove laitance. Currently, tops of girders are intentionally roughened to a 5 mm amplitude. Sandblasting all surfaces is unnecessary when no laitance is present and in fact it smooths the roughened surface. Blast media may also become</p>	<p>Please see response to comment 479-7 above.</p>

		<p>trapped in the surface, further decreasing bond. Snow and ice on girders in winter add additional complications if the sandblasting isn't completed immediately after curing.</p> <p>The space, equipment, labour and capital investment needed to perform both steps as written represent a major change for precasters. It significantly increases cost and reduces plant efficiency without providing demonstrated structural benefit. Clauses of this magnitude create barriers to bidding MTO work by placing heavy burdens on precasters for work that has not been identified as a real performance issue but rather as a preference or "wish list" item.</p> <p>Proposed change: It is recommended that the clause revert to the previous approach, limiting surface preparation to areas where laitance is present.</p> <p>Concrete surfaces against which new concrete is to be placed shall be: a) Left with a rough surface finish where the depth of the indentations are at least 5 mm and the spacing is not greater than 15 mm; <del>and</del> or</p>	
--	--	--	--

<p>483-20</p>	<p>Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)</p>	<p><b>1355.07.11.01</b></p> <p><b>Comment:</b> With restructuring specifications and introducing the 1355 with this new requirement all other precast elements have to be moist cured, this is a big change. E.g. sound walls did not require moist curing, now suddenly all precast has to be moist cured. What is the base for this change, data? This is no longer feasible for a lot of products.</p> <p><b>Proposed change:</b> This clause has to exclude certain products, The following products do not require moist curing: noise barriers, concrete barriers, and slabs.</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 barrier and slabs are typically exposed to a harsher environment and are required to be moist cured.</p>
<p>483-21</p>	<p>Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)</p>	<p><b>1355.07.11.03</b></p> <p><b>Comment:</b> A new requirement for removing formwork within 24 hours of concrete placement has been added for bridge deck elements and MSE elements only.</p> <p>The 24-hour form removal requirement presents a significant burden on Precasters that don't have weekend shift work, in that a Friday cast is no longer possible with this clause, which would lead to a loss of up to 48 production days in a year.</p>	<p>Please see responses to comments 479-8 and 480-2 above.</p>

		<p>It appears this direction is given to ensure these elements see a full cycle of moist curing, as they are most likely to experience chloride exposure during normal operating conditions. It is recommended that this paragraph be removed and replaced with something stressing the importance of maximizing the moist cure time for these elements.</p> <p><b>Proposed change:</b>          Bridge deck elements and MSE elements shall not be left in the formwork for longer than 4 days, followed by at least 48 hours of moist curing as specified above.</p>	
483-22	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.07.11.04</b></p> <p><b>Comment:</b>          This is a new requirement, and certainly adds another variable to an already complex curing process. What is the rationale for changing the previous requirements?</p> <p><b>Proposed change:</b>  <del>i. Photographs shall be taken every 8 hours for the first 24 hours of the curing period.</del>          ii. Photographs shall be taken every 24 hours for the remainder of the curing period.</p>	This is a longstanding requirement to ensure that moist curing is monitored and documented.

483-23	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p>1355.07.13.01 b)</p> <p><b>Comment:</b> In the previous OPSS 909, the requirement allowed the concrete to drop below 10°C once it had reached 75% of the specified 28-day compressive strength. By removing this provision, there is no longer any allowance to account for temperature drops once the concrete has gained sufficient strength.</p> <p>This change effectively eliminates the ability to disregard minor &lt;10°C occurrences that do not affect structural performance. Maintaining temperatures above 10°C for the entire curing period, regardless of strength gain, may create unnecessary corrective actions without proven benefit to durability or structural adequacy.</p> <p><b>Proposed change:</b> It is recommended that the clause consider reinstating a threshold tied to concrete strength, as in OPSS 909.07.11.01 (2016), to avoid overly restrictive requirements.</p>	<p>To be discussed at meeting with industry.</p> <p><b><u>Follow-up to Dec. 12, 2025 meeting:</u></b></p> <p><u>MTO has reviewed this requirement, and this exception for girders will be reinstated in OPSS 1355.</u></p>
483-24	Individual - Comments submitted on behalf of Ontario precast producers	<p><b>1355.07.13.02</b></p> <p><b>Comment:</b> The CA can have access to raw temperature data, temperature graphs and</p>	<p>Please see response to comment 479-9 above.</p>

	(CPCI and its ON member producers)	<p>even check the labeling of probes but strongly do not agree that the CA should have access to plant's temperature monitoring platform as this has other data unrelated to MTO projects and is unnecessary. The same clause also requires PH-CC-117 form, which needs clarification as it's normally only used for cold water temperature reporting, but the clause requires for any temperature monitoring.</p> <p><b>Proposed change:</b> When requested, the Contract Administrator and/or any other Owner's representatives shall be provided <b>access to raw data of the project</b> to verify temperature readings and temperature sensor function. Clarification also needed if submitting form PH CC 117 is now required for all weather temperature monitoring?</p>	
483-25	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.07.14 – Exposure</b></p> <p><b>Comment:</b> The current clause removes previous allowances under OPSS 909.07.14 for the exposure period. Previously: a) The requirements in the Control of Temperature subsection did not apply during exposure. b) No more than three consecutive</p>	<p>Agree, this allowance has been reinstated for girders-only, to OPSS 1355.</p> <p><b><u>Follow-up to Dec 12, 2025 meeting:</u></b></p> <p><b><u>The requested change has already been made.</u></b></p> <p><b><u>Revised wording is as follows:</u></b></p>

		<p>thermocouple measurements could fall below 10°C, and none below 5°C, when measured at 15 minute intervals at locations specified in Table 3.</p> <p>These leniencies allowed minor temperature fluctuations without affecting acceptance. With their removal, the clause as currently written could result in rejection of a product if any concrete surface temperature falls below 10°C during the exposure period. This is overly punitive and does not reflect the actual risk to concrete performance.</p> <p><b>Proposed changes:</b> It is recommended that the provisions from OPSS 909.07.14 be reinstated to allow reasonable deviations during exposure, ensuring that enforcement is consistent with established practice and avoids unnecessary rejection of otherwise compliant products.</p>	<p><u><i>For girders-only, during the exposure period:</i></u></p> <p><u><i>a) The requirements in the Control of Temperature and Temperature difference subsection do not apply.</i></u></p> <p><u><i>b) There shall be no more than 3 consecutive thermocouple measurements of surface temperature below 10°C, and none below 5°C, when measured at 15 minute intervals at locations according to Table 3.</i></u></p>
483-26	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.07.18.02 – Exposed Surfaces</b></p> <p><b>Comment:</b> The MTO approved list of proprietary patching materials does not include options that achieve both uniform colour and appearance.</p> <p><b>Proposed change:</b></p>	Please see response to comment 479-10 above.

		Allow materials that provide consistent colour, pattern and texture. It is a subjective requirement and acceptance criteria need to be measurable and better defined.	
483-27	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.07.19.04</b></p> <p><b>Comment:</b> High Cover is listed twice.</p> <p><b>Proposed change:</b> Intermediate cover??</p>	Thank you, the clause has been updated.
483-28	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.07.22.04.04</b></p> <p><b>Comment:</b> It is not clear at what point do cylinders have to be sent to the lab.</p> <p><b>Proposed change:</b> More clarity is required on this item.</p>	Sample delivery is covered by SSP 199F57.
483-29	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.07.25.02 c) &amp; 1355.07.04.01</b></p> <p><b>Comment:</b> Precasters are now required to provide a test report from the hold-down manufacturer demonstrating that the final stress along the full length of strand is uniform. These reports do not exist, and manufacturers do not have the facilities to perform this type of testing. To prove</p>	Agree, the clause has been revised to remove this requirement.

		<p>uniform stress, they would need to test every possible incline, deflection, and length for each design, which is not practical.</p> <p>CPCQA certified plants already check this by measuring the force on two deflected strands at the dead end to confirm it is within allowable limits. This provides direct proof that the strand stress is acceptable. Asking manufacturers for reports on arbitrary or “worst case” strand layouts adds no value and cannot be done in a meaningful way. The existing CPCQA checks should be accepted as sufficient.</p> <p><b>Proposed change:</b> Delete the following: <del>e) Test report from the manufacturer of the hold down device demonstrating that the final stress along the full length of the strand is uniform.</del></p>	
483-30	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.08.10.01</b></p> <p><b>Comments:</b> This clause states if an element fails to meet the specified dimensional or cover tolerances it shall be deemed rejectable. This is overly punitive when a repair can be done or when the dimension has little to no impact on the durability, structural adequacy, or integrity of the element.</p> <p><b>Proposed change:</b></p>	<p>This is a longstanding requirement. Contractor is free to submit a proposal.</p> <p><b><u>Follow-up to Dec 12, 2025 meeting:</u></b> <u>MTO has reviewed this requirement, no change will be made to the specification.</u></p>

		<p>If an element fails to meet the specified dimensional or cover tolerances:</p> <p>a) It shall be marked as non-compliant; and</p> <p>b) The Owner will decide based on the severity of the non-compliance to either repair or reject the element at the Contractor's expense.</p>	
483-31	<p>Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)</p>	<p><b>1355.08.11.02 b)</b></p> <p><b>Comment:</b> This is too punitive, the old OPSS.PROV 909 Clause 909.07.14 b) was a lot more practical. Consideration should be given to revert back to the previous requirement.</p> <p><b>Proposed change:</b> b) There shall be no more than 3 consecutive thermocouple measurements of surface temperature below 10 C and non below 5 C when measured at 15 min intervals.</p>	<p>Please see response to comment 483-25 above.</p>
483-32	<p>Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)</p>	<p><b>1355.08.11.02 c)</b></p> <p><b>Comment:</b> The Clause 1355.08.11.02 c) is significantly more punitive than the previous wording from OPSS.PROV 909. The original clause in 909 was more specific and practical. Under the new clause in 1355 any spall not covered by Table 4 for standard repairs would result</p>	<p>The limitation on repairs to bearing areas of girders remains a requirement, see note 2 of Table 4 of OPSS 1355.</p> <p>It was implied that if not repairable by standard methods, the elements are rejectable, and a repair proposal is required. This has now been made</p>

		<p>in rejection which is overly harsh. It is recommended that the clause revert to the previous approach limiting rejection to defects within 30 mm of the bearing area for girders.</p> <p><b>Proposed change:</b>  c) If an element has honeycombing, voids, cavities, spalls or delaminations within a bearing surface area defined by the contact area of the bearing plus 30 mm on all sides except when the bearing area is fully encased in concrete.</p>	<p>clear with the addition of 1355.08.11.02(c).</p>
483-33	<p>Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)</p>	<p><b>1355.08.10.01 a)</b></p> <p><b>Comment:</b>  Contradiction of a) with Table 4 Repairable by standards Methods for low cover readings below -5mm and -0mm of the specified cover.</p> <p><b>Proposed change:</b>  it shall be deemed rejectable If the element fails to meet the conditions listed in Table 4 for low cover</p>	<p>Please see response to comment 479-19 above.</p>
483-34	<p>Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)</p>	<p><b>1355.08.10.01 &amp; 1355.08.11.03 f)</b></p> <p><b>Comment:</b>  Element rejectable if fails to meet dimensional tolerances needs to be removed as it is deemed unacceptable this contradicts: Repair under the clause</p>	<p>Doesn't contradict, if dimensional tolerances don't meet, it is rejectable, however a repair proposal may be submitted.</p> <p><b><u>Follow-up to Dec 12, 2025 meeting:</u></b></p>

		<p>1355.08.11.03 (f) - Dimensional tolerances of the element do not meet the requirements of the Contract Documents.</p> <p><b>Proposed change:</b> Delete/clarify 08.10.01 a)</p>	<p><u>MTO has reviewed this requirement, no change will be made to the specification.</u></p>
483-35	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.08.10.02</b></p> <p><b>Comment:</b> Dimensional and cover (Both to satisfy rejectable?) Item 38b applies here also.(see two comments below)</p>	<p>Thank you, agree, it should be “or”, change has been made.</p> <p>See response above.</p>
483-36	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>1355.08.11.03 g)</b></p> <p><b>Comment:</b> This requirement will create unnecessary work and “proposals for repair” that ultimately state no repair is needed, since pour lines are cosmetic and have no impact on durability, structural adequacy, or integrity. For this reason the presence of pour lines should be removed from this clause as there is no repair that can address them.</p> <p><b>Proposed change:</b> <del>g) There is the presence of pour lines;</del></p>	<p>Please see response to comment 479-15 above.</p>
483-37	Individual - Comments submitted on behalf of Ontario	<p><b>Table 3 - Girders</b></p> <p><b>Comment:</b></p>	<p>Thank you, this has been corrected to say (3) surface temperature sensors.</p>

	precast producers (CPCI and its ON member producers)	<p>The number of surface temperature sensors required for girders is listed as (1). Please confirm if this is correct as Note B requires a surface temperature sensor to be installed at each location where internal concrete temperature is measured.</p> <p><b>Proposed change:</b> More clarity is required on this item.</p>	
483-38	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>Table 3 – Bridge Elements</b></p> <p><b>Comment:</b> The table requires surface temperature measurements for all bridge elements. Previously SSP999S31 Clause 7.01.16.02 only required a surface probe for elements greater than 200 mm thick. As written the table would require partial depth deck panels (90–110 mm thick) to have a core and surface probe in each element which is unnecessary for elements of that thickness. Please clarify the intent of the surface measurement for bridge elements.</p> <p><b>Proposed change:</b> More clarity is required on this item.</p>	Please see response to comment 479-16 above.
483-39	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>Table 4 - Bugholes</b></p> <p><b>Comment:</b> Requiring bugholes to be filled within 3 days of form removal may pose challenges since this typically falls within</p>	Please see response to comment 479-17 above.

	<p>member producers)</p>	<p>the curing period of the product. For curing methods such as water immersion or continuous water application early filling could conflict with the manufacturer's instructions for proprietary patching materials. This would also require filling during the exposure period which may not allow enough time to complete the operation. It is not feasible for concrete containing silica fume since moist curing is required throughout the entire exposure period. This repair method should be revised to allow bughole filling after curing is complete.</p> <p><b>Proposed change:</b>  a) After curing of the element is complete, filling bugholes should be completed.</p>	
<p>483-40</p>	<p>Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)</p>	<p><b>Table 4 - Cracks</b></p> <p><b>Comment:</b>  "All elements except for girders: For width of crack &lt; 0.30 mm: Apply a concrete sealer to the entire element, except areas against which new concrete is to be placed or areas in contact with bearings, if applicable."</p> <p>It is recommended to adopt wording from OPSS.MUNI 941 Nov 2019, Table 1.</p>	<p>Please see response to comment 479-18 above.</p>

		<p>Apply sealer acceptable to the Owner to the cracked areas.</p> <p><b>Proposed change:</b> Apply sealer acceptable to the Owner to the cracked areas.</p>	
483-42	<p>Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)</p>	<p><b>Table 4 – Low Cover</b></p> <p><b>Comment:</b> "Low cover readings between -5 mm and - 0 mm of the specified cover, except girder soffits between bearing cutouts." The tolerance stated as "-0 mm" appears to be an error. It should read "-10 mm," otherwise any value less than the specified cover would trigger a sealing requirement which does not seem to be the intent.</p> <p><b>Proposed change:</b> Low cover readings between - 5 mm and - 10 mm of the specified cover, except girder soffits between bearing cutouts.</p>	<p>Please see response to comment 479-19 above.</p>
483-43	<p>Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)</p>	<p><b>Table 4 – Low Cover</b></p> <p><b>Comment:</b> "Where sealing of a visible element is required all elements of the component or structure shall be sealed for consistency of appearance." As written, this would require sealing all</p>	<p>Please see response to comment 479-19 above.</p>

		<p>girders in a structure if a single low cover is found, since all girder products are considered visible elements. This seems excessive. The previous OPSS.PROV 909 wording limited sealing to exterior girders in the same line, which was more practical. MTO's list of approved sealers, such as Sikagard® H 1000, do not affect appearance.</p> <p><b>Proposed change:</b> Change the requirement to avoid unnecessary sealing and revert back to original wording from OPSS.PROV 909.</p>	
483-44	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>Table 5 – Dimensional Tolerances for Girders</b></p> <p><b>Comment:</b> The cover and camber measurements/tolerances have been removed from the table. While camber is still addressed in OPSS.PROV 909 (Nov 2025), the girder fabricator is not always the same subcontractor responsible for installation. To ensure compliance is verified prior to installation, camber requirements should also be included in OPSS.PROV 1355.</p> <p><b>Proposed change:</b> Add camber requirements into OPSS 1355.</p>	<p>Precasters are free to make any QC measurements at the plant.</p> <p>Final camber QA requirements are specified only in OPSS 909.</p>

483-45	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>Table 7 – Note 2</b></p> <p><b>Comment:</b> There is no reference to Note 2 in the Table.</p> <p><b>Proposed change:</b> More clarity is required on this item.</p>	Thank you for noting the typo, it is corrected.
483-46	Individual - Comments submitted on behalf of Ontario precast producers (CPCI and its ON member producers)	<p><b>Table 8 – Bridge Elements</b></p> <p><b>Comment:</b></p> <p>Six (6) cores per lot are required for partial depth deck panels with up to three different diameters. We question whether in-situ coring is practical on most designs since it may cut through prestressing strand or reinforcement, particularly for larger diameter cores of 100 mm and 150 mm. The requirement will also leave visible patching that makes the product appear “swiss cheesed.” The current MTO approved proprietary patching material list does not provide a product that matches the colour of the native mixes used for these products which leads to permanent aesthetic deficiencies. Consideration should be given to using cylinders or casting a companion block of concrete during production with the same concrete batch used in the elements. This would allow cores to be extracted without</p>	Please see response to comment 479-22 above.

		<p>reinforcement conflicts and avoid the aesthetic issues associated with in-situ coring.</p> <p><b>Proposed change:</b> Consider fabricating a companion sample to the bridge element to avoid damaging new products</p>	
489-1	OCPA – Ontario Concrete Pipe Association	<p><b>OPSS 1355</b></p> <p><b>Comment:</b> Show your additions and Show your deletions</p>	A compare document showing changes was posted on TCP along with the other documents.
489-2	OCPA – Ontario Concrete Pipe Association	<p>Would this specification apply to site-casting of precast units?</p>	<p>Any site-casting of precast components are required to be done at a certified precast plant and all requirements of this specification would apply.</p> <p><b><u>Follow-up to Dec 12, 2025 meeting:</u></b></p> <p><u>MTO has reviewed this requirement, no change will be made to the specification.</u></p>
489-3	OCPA – Ontario Concrete Pipe Association	<p><b>1355.03</b></p> <p>Proposed revision: Pretensioning means a method of prestressing in which strands for reinforcing purposes are tensioned before the</p>	This addition is not necessary.

		<p>concrete is placed.</p> <p><b>Comment:</b> Clause may be intuitive, however more description is added.</p>	
489-4	OCPA – Ontario Concrete Pipe Association	<p><b>1355.04.02.02</b></p> <p><b>Comment:</b> Current certification status be accepted as the appropriate measure of compliance. This approach ensures transparency for the Ministry while maintaining the credibility and integrity of the certification framework.</p> <p>Recommend adapting the wording from OPSS.PROV 912 (Section 912.04.02.03). The OPSS 912 wording is well aligned with both CSA requirements and CPCQA certification rules and regulations.</p>	Please see response to comment 479-2 above.
489-5	OCPA – Ontario Concrete Pipe Association	<p><b>1355.04.02.06</b></p> <p><b>Comment:</b> Request that resistance welding be formally defined within the specification.</p> <p>Precasters should be allowed to submit an annual proposal and test results directly to MTO for approval, similar to the process used for SCC, rather than requiring approval on every project.</p>	Please see response to comment 479-1 above.

489-6	OCPA – Ontario Concrete Pipe Association	<p><b>1355.05.03</b></p> <p><b>Comment:</b>            Clause be revised to clearly state whether hardware (e.g., hold-down devices) located more than 40 mm from the concrete surface may continue to be fabricated from black steel, consistent with the former provision.</p>	Please see response to comment 479-3 above.
489-7	OCPA – Ontario Concrete Pipe Association	<p><b>1355.05.11</b></p> <p><b>Comment:</b>            This list should be published on DSM at the time of tender to ensure transparency and consistency for all parties.</p>	Please see response to comment 479-4 above.
489-8	OCPA – Ontario Concrete Pipe Association	<p><b>1355.07.05.02</b></p> <p><b>Comment:</b>            For this method of welding, precasters should be allowed to submit an annual proposal and test results directly to MTO for approval, similar to the process used for SCC, rather than requiring approval on every project.            Resistance welded reinforcing materials (i.e. Welded Wire Reinforcing, WWR as supplied by vendors would not be subject to this method of QA requirements.</p>	Requirements are in OPSS 905 for resistance welding. The statement requiring approval by the owner has been removed.
489-9	OCPA – Ontario Concrete Pipe Association	<p><b>1355.07.10.02</b></p> <p><b>Comment:</b></p>	Please see response to comment 479-6 above.

		<p>Allowing the average temperature method ensures feasibility for large elements while still maintaining quality and compliance, as a practical and effective approach of the former provision.</p>	
489-10	OCPA – Ontario Concrete Pipe Association	<p><b>1355.07.11.03</b></p> <p><b>Proposed revision:</b>            Formwork <del>shall be removed</del> from bridge deck elements and MSE elements <del>within 24 hours of concrete placement and shall not be left in the formwork for longer than 4 days</del>  <del>and</del> all surfaces previously covered by forms shall be immediately moist cured as specified above for the remainder of the specified curing period.</p> <p><b>Comment:</b>            We respectfully and kindly request that the clause be revised to focus on the requirement for a full four-day moist cure, rather than form removal timing.</p> <p>Suggested wording:            “Bridge deck elements and MSE elements shall not be left in the formwork for longer than 4 days, followed by at least 48 hours of moist curing as specified above.”</p>	Please see responses to comments 479-8 and 480-2 above.

489-11	OCPA – Ontario Concrete Pipe Association	<p><b>1355.07.13.03</b></p> <p><b>Comment:</b> PH-CC-117 be revised to clarify its applicability, or exempt precasters who operate indoors with digital temperature monitoring.</p>	Please see response to comment 479-9 above.
489-12	OCPA – Ontario Concrete Pipe Association	<p><b>1355.18.02</b></p> <p><b>Comment:</b> Approved list be expanded to include materials that provide improved colour and appearance uniformity, while still meeting durability and performance standards.</p>	Please see response to comment 479-10 above.
489-13	OCPA – Ontario Concrete Pipe Association	<p><b>1355.07.27</b></p> <p><b>Comment:</b> Request that “unloading” be removed from the scope of the precaster in this clause, limiting responsibility to lifting and loading (at plant), and transportation to project site. Lifting and unloading (at project site) are the responsibility of the project contractor.</p>	OPSS 1355 forms part of the contract with the Contractor, as defined in OPSS 100. All requirements are the responsibility of the contractor, regardless of which specification they are in.
489-14	OCPA – Ontario Concrete Pipe Association	<p><b>1355.07.27</b></p> <p><b>Proposed revision:</b> Inclusion of reference to document CAIS 0000-30 (Template for Pre-Fab Precast Concrete).</p>	<p>OPSS specifications do not reference CAIS specifications.</p> <p>However, based on this comment, a requirement that the Contractor attend the pre-fabrication meeting has been added to OPSS 1355.</p>

		<p><b>Comment:</b> The Prefabrication Template offers opportunity to discuss and confirm responsibilities in this subject area.</p> <p>The Prefabrication Template was proposed by OCPA and was developed &amp; published with the assistance of Bo Ni, Senior Concrete Engineer - Standards and Contracts Branch, MTO.</p>	<p>A reference and requirement to use CAIS 0000-30 (Template for Pre-Fabrication Meeting for Precast Concrete Elements) already exists in the CAIS 100 (included in all contracts). Please see Section CAGC 2.04.03 Meeting Topics and Templates (as part of the Section 2: Project Management) of CAIS 100. It is a mandatory requirement for the Contract Administrator to use the pre-fabrication meeting template.</p>
489-15	OCPA – Ontario Concrete Pipe Association	<p><b>1355.08.03.02</b></p> <p><b>Proposed revision:</b> Referee testing of compressive strength may only be invoked by the Contractor to the <b>Manufacturer</b> within 3 Business Days of receipt of the acceptance test result for compressive strength.</p> <p><b>Comment:</b> To remove ambiguity and ensure clear assignment of responsibility.</p>	<p>MTO has a contract with the Contractor, as defined in OPSS 100. The Contractor is responsible for all decisions, including whether to invoke referee testing.</p>
489-16	OCPA – Ontario Concrete Pipe Association	<p><b>1355.08.05.04.01</b></p> <p><b>Proposed revision:</b></p>	<p>Please see response to comment 489-15 above.</p>

		<p>Referee testing of compressive strength may only be invoked by the Contractor to the <b>Manufacturer</b> within 3 Business Days of receipt of the acceptance test result.</p> <p><b>Comment:</b> To remove ambiguity and ensure clear assignment of responsibility.</p>	
489-17	OCPA – Ontario Concrete Pipe Association	<p><b>1355.08.11.03</b></p> <p><b>Comment:</b> Remove “pour lines” from the list of defects requiring an NCR</p>	Please see response to comment 479-15 above.
489-18	OCPA – Ontario Concrete Pipe Association	<p><b>Table 3</b></p> <p><b>Comment:</b> Clarification on the intent of the surface temperature measurement requirement for bridge elements, specifically whether the requirement is intended to apply to all elements, or only to those greater than 200 mm thick, consistent with the former provision.</p>	Please see response to comment 479-16 above.
489-19	OCPA – Ontario Concrete Pipe Association	<p><b>Table 4</b></p> <p><b>Comment:</b> Request that the clause be revised to allow bughole filling after curing is</p>	Please see response to comment 479-17 above.

		complete. This ensures compatibility with 4-day curing requirements, proprietary patching instructions, and maintains product durability and quality.	
489-20	OCPA – Ontario Concrete Pipe Association	<p><b>Table 4 (specific to “Cracks”)</b></p> <p><b>Comment:</b> All elements except for girders: For width of crack &lt; 0.30 mm: Apply sealer acceptable to the Owner to the surface zone within proximity to the cracks (suggest 500mm offset from crack).</p> <p>This ensures repairs are effective, efficient, and consistent without imposing unnecessary sealing on unaffected portions of the element.</p>	Please see response to comment 479-18 above.
489-21	OCPA – Ontario Concrete Pipe Association	<p><b>Table 4 (specific to “Low Cover”)</b></p> <p><b>Comment:</b> Request that the tolerance be corrected to “-10 mm” to avoid unintended sealing requirements.</p>	Please see response to comment 479-19 above.
493-1	Miller Paving Ltd./ Redi Rock Retaining Wall Systems	If empirical data can be provided, eg side by side comparisons of moist cured vs. non moist cured elements to demonstrate the absence of shrinkage/cracking and to compare concrete strengths, could a clause be added to provide for the removal of the moist curing requirement at the owners discretion? For dimensionally smaller precast elements, moist curing requirements significantly increase	These are longstanding curing requirements for precast, with demonstrated good long-term performance.

		<p>production costs while providing nominal to zero benefit to the strength and overall quality. the additional handling required to wet cure newly stripped low strength elements also increases the risk of non visual damage, impacts, cracks etc to occur, negating any potential benefit of wet curing.</p>	
<p>495-1</p>	<p>EKHO Infrastructure Solutions (Durisol, Design Concrete, Silentium, Faddis)</p>	<p><b>Comments:</b></p> <p>Page 1 of 42: Heading of the document has materials spelt incorrectly.</p> <p>Page 3 &amp; 4 of 42: 1355.03 Concrete Barrier - what is the definition of permanent and does it apply to our noise wall system? System is comprised of removable and replaceable components between permanent structures (structures are wide flange beams).</p> <p>Noise Barrier - For reflective noise walls, bottom of the upper panels are of the same lot.</p> <p>Structure - Our noise wall system utilizes wide flange beams that carry the load. Precast panels do not carry load and are not permanent. <u>Clarification: Structure = The post (steel wide flange beam) and foundation are a permanent structure. Temporary = The noise wall panels/barrier are removeable components that can be</u></p>	<ul style="list-style-type: none"> <li>- Thank you for noting this, “Material” typo has been corrected.</li> <li>- No, concrete barrier does not include noise barrier wall components. The definition of Concrete Barrier in OPSS 1355 has been revised, to remove the word “permanent” as this is covered in OPSS 740.</li> <li>- Noise Barrier – Yes, it would be a separate lot.</li> <li>— Structure – <del>Please provide clarity for this comment. There is no conflict with the definition and the specification.</del></li> <li>- Page 4 - Agree, a change was made to section 1355.07.01 to add dry cast for noise barrier (if dry cast concrete is used for the accepted DSM submission). <u>Specification revised as follows:</u></li> <li>- <u>“Precast concrete shall be wet cast unless otherwise specified</u></li> </ul>

		<p><u>replaced. Not a permanent structure. Bridge vs Noise Walls</u></p> <p>Page 4 of 42: 1355.04.01.02 - Concrete Mix Design - Refer to note 1355.07.01 regarding mix design exception.</p> <p>Page 6 of 42: 1355.05.03 - Associated Hardware - Please define 'associated hardware' and does this include lifting hardware? - <u>Additional comment: Hot Dipped Galvanized Recommend exempting as not a common material with preengineered lifters and not readily available. Lifting hardware is always exposed.</u></p> <p>Page 8 of 42: 1355.07.01 - General - Our reflective noise wall system, inclusive of the bottom panels, is produced using drycast methodology. please add an exception.</p> <p>Page 9 of 42: 1355.07.05.02 - Welding - Several noise wall products are fabricated by resistance welding (mesh) and should be exempt and follow CSA standards for resistance welding. <u>Additional comment: Can you please provide an update on how this is noted to be exempt?</u></p> <p>Page 10 of 42: 1355.07.09.01 - Wet Cast</p>	<p><u>in the Contract Documents, except for MSE or noise barrier, which may be wet cast or dry cast depending on the designation on the DSM list.”</u></p> <ul style="list-style-type: none"> <li>- Page 6 - Yes, this requirement applies to all hardware. Is this is a concern? <u>Lifting hardware must be stainless steel, hot-dip galvanized or non-metallic, or it must be cutoff to 50mm below the concrete surface and patched.</u></li> <li>- Page 8 – added dry cast for noise barrier.</li> <li>- Page 9 - Welded wire reinforcement is allowed according to OPSS 905 and approved noise wall product drawings. For resistance welding please see response to comment 479-1 above.</li> <li>- Page 10 – these requirements apply to all precast components, including noise barrier.</li> <li>- <u>Page 11 - Drop height applies to all precast components, including SCC. When use of SCC is permitted, the SCC NSSP governs, and it includes the following requirement:</u></li> </ul>
--	--	---	---

		<p>Concrete - c) &amp; d) - can we investigate the feasibility given the sizes of our panels and discuss special dispensation of our noise walls?</p> <p>Page 11 of 42: 1355.07.10.01 - General - Can an exception for noise wall be provided when manufactured as vertical pours align similar to the culvert dimensions. This would be for large format panels. <u>Additional comment: When using SCC, it is recommended we pour from one location at the lowest spot in the mould. SCC production should be exempted.</u></p> <p>Page 12 of 42: 1355.07.11.01 - Curing General - what is the 'm' in the first sentence? minutes? used elsewhere in the report as metres. Concrete finishing and applying moist curing system cannot be applied in the allotted duration. <u>Additional comment: "Moist curing of exposed surfaces shall commence immediately after concrete finishing of each element and shall be applied within 2 – 4 m of concrete placement." Meters does not make sense in this sentence. Please confirm how this is applied. If the 'm' should be minutes, the statement below requires confirmation. 'Concrete finishing and applying moist curing system cannot be applied in the allotted duration of 2-4 minutes.'</u></p>	<p><u>"The maximum horizontal distance between the discharge point of the SCC and its final position shall be 10 m."</u></p> <ul style="list-style-type: none"> <li>- Page 12 – 'm' refers to meters. <u>This requirement applies to larger components. For components less than 4 m, the requirement wouldn't take effect.</u></li> <li>- Page 14 – it depends on the quality, this hasn't been an issue to-date.</li> <li>- Page 16 – Under review.</li> <li>- Page 21 – <u>A requirement to provide an extra element for coring was added (to be discarded), and an exception to the the spacing requirements was added for noise barrier core sampling.</u></li> <li>- Salt scaling is not required to be tested for noise barriers.</li> <li>- Page 41 – even if bottom panels and upper panels are produced at the same time, a separate lot is required for different types of elements (including different shapes, reinforcement configuration, etc.). No change to the specification is required. <u>Lots are confirmed on a contract-</u></li> </ul>
--	--	---	---

		<p>Page 14 of 42: 1355.07.11.04 - Records of Inspection of Moist Curing - c) - what options for visual record are accepted such as using a screen shot from video cameras?</p> <p>Page 16 of 42: 1355.07.17 - Markings Stenciled - Given the amount of pieces a day, would alternative identifiers such as tags be considered? <u>Additional comment: Two options for marking: Product marked on side of precast using Quik Stik All Purpose Solid Paint Marker Quik Stik All Purpose Solid Paint Marker Permanent ID tags embedded into precast during production. Concrete Marking Product Data Tracking Software for the Construction Manufacturing and Precast Concrete Industries — Idenciaidencia program</u></p> <p>Page 21 of 42: 1355.07.22.04.07 - Coring for Acceptance Testing - regarding the edge distance, we are typically limited to a 500mm noise wall panel. There is potential of steel in the sample (mesh). <u>Additional comment: Panels are 500mm high. Edge distance as described cannot be achieved in a single panel.</u></p>	<p><u>specific basis at the pre-fabrication meeting.</u></p>
--	--	--	--

		<p>Page 22 of 42: 1355.07.22.04.09 - Salt Scaling Sawn Samples - Does this exempt noise walls as reflective noise walls are patterned both sides.</p> <p>Page 41 of 42: Table 8 - 5) - Bottom panels and upper panels are of the same lot. Should not be considered separately.  <u>Additional comment: Please confirm that if the panels are manufactured with the same shape, reinforcement, configuration, etc., that the panels would be of the same lot.</u></p>	
496-1	Individual	<p><b>1355.04.02.05 Notification of Placement</b></p> <p>Plant schedules are still being adjusted 14 days in advance. Schedules should be submitted no earlier than 7 days ahead. Day-to-day changes should not require written notification to the CA. This is between the precaster and the contractor. The CA receives notification when each production lot is complete.</p>	Please see response to comment 483-6 above.
497-1	Individual	<p><b>1355.04.02.06 Welding</b></p> <p>Resistance welding should be permitted for reinforcing cages in general. Not on a project-to-project basis.</p>	Requirements are in OPSS 905 for resistance welding. The statement requiring approval by the owner has been removed.
498-1	Individual	<p><b>1355.05.03 Associated Hardware</b></p>	This clause has been revised to provide clarity. The zinc chromate is

		The requirement for electro zinc chromate should be removed as this is not commercially available. Hot dipped galvanizing is allowed for surface plates in later clause 05.06.	only allowed on hold down devices. All other hardware must be non-metallic or hot dip galvanized.
499-1	Individual	<b>1355.07.11.01 General</b>  Clarify which precast product types the 2 to 4m requirements apply to.	It applies to anything greater than 2 to 4 m.
500-1	Individual	<b>1355.07.13.03 Temperature Monitoring Records</b>  PH-CC-117 (COLD WEATHER CONCRETING TEMPERATURE RECORD) form applies to cast-in-place construction not indoor precast plants. Temperature monitoring data is provided from thermocouples. This should be removed from the precast specification.	Please see response to comment 479-9 above.
501-1	Individual	<b>1355.07.24 Manufacturer's Certificate of Conformance</b>  One C of C should be issued for all the elements being delivered to a project or site, not each individual shipment. The elements covered can be listed on the single C of C.	MTO requires that the elements are certified prior to shipping. MTO does not want to install elements that do not meet the requirements.
502-1	Individual	<b>Table 8</b>  Confirm QA sampling only applies to permanent precast concrete barriers (OPSS 740), not temporary precast barriers (OPSS 741).	Yes, OPSS 1355 QA requirements and OPSS 740 QA requirements apply to permanent precast concrete barrier.

**Comments received by email:**

Date	Organization	Email Comment	MTO Response
Oct. 16, 2025	Decast Ltd.	See document received by email RE: - Resistance Welding	Please see response to comment 479-1 above.
Oct. 16, 2025	Decast Ltd.	See document received by email RE: - NCR for Pour Lines	Please see response to comment 479-15 above.
Oct. 16, 2025	Decast Ltd.	See document received by email RE: - Abrasive Blast Cleaning Requirements	Please see response to comment 479-7 above.
Dec. 5, 2025	Decast Ltd.	<p>See document received by email RE: - 1355.07.14 Silica Fume Concrete -Request for 2 hours of exposure, or at min 1 hour</p> <p>The first item relates to <u>the exposure time permitted for silica-fume concrete.</u></p> <ul style="list-style-type: none"> <li>- In its current form, the requirement for continuous moist curing with zero exposure time is not practical in an indoor precast environment.</li> <li>- A minimum of 1 hour is needed simply for safe demoulding and crane handling of the piece to curing chamber.</li> <li>- Allowing up to 2 hours of exposure, consistent with other indoor precast products, would</li> </ul>	<p><del>To be discussed at meeting with industry.</del></p> <p><b><u>Follow-up to Dec 12, 2025 meeting:</u></b></p> <p><u>MTO has reviewed this request and a change had been made to the specification to align exposure time for silica fume concrete with requirements for regular concrete.</u></p>

		<p>provide the flexibility required to complete essential QC verification work, avoid multiple casts being affected by undetected issues, and reduce re-handling during cold weather. The detailed reasoning is attached for your review.</p>	
<p>Dec. 5, 2025</p>	<p>Decast Ltd.</p>	<p>The second item concerns <u>the scope of OPSS 1355</u>.</p> <ul style="list-style-type: none"> <li>– While the specification references product tables, the scope section of the spec does not clearly define the product types included. To avoid misinterpretation, we recommend clarifying that the standard applies to box culverts with spans of <del>3 m</del> and <b>greater than 3 m</b>, including double-cell units, girders and bridge deck panels. This clarification would support consistent understanding and implementation across the industry.</li> </ul> <p>Update: As per the product tables referenced in OPSS 1355, the scope should include box culverts with <u>spans greater than 3 m</u>, including double-cell units, girders, and bridge deck panels.</p>	<p>There is no need to specify which culverts OPSS 1355 applies to in the specification. OPSS 1355 only applies to components that reference OPSS 1355. OPSS 912 for culvert with spans greater than 3 m, references OPSS 1355.</p> <p><b><u>Follow-up to Dec 12, 2025 meeting:</u></b></p> <p><u>MTO has reviewed this requirement, and this specification will only be included in a contract when it is specified in the related construction specification. For example, OPSS 912 for large culverts (greater than 3 m) references OPSS 1355. However, OPSS 422 for small culverts (3 m and less) does not reference OPSS 1355. OPSS 1355 does not apply to small culverts.</u></p> <p><b><u>Follow-up to Feb 11, 2025 meeting:</u></b></p> <p><u>MTO has reviewed how OPSS 1355 is referenced, and OPSS 1355 is only</u></p>

			<u>brought into a contract when another specification or special provision references it. MTO will review all related specifications to ensure proper cross-referencing.</u>
--	--	--	--