March 11, 2026

Ken Nunley
Amrize, Utelite Plant
6375 W Three Mile Cyn Rd
Coalville, UT 84017

Phone: (801) 604-5459
kenneth.nunley@amrize.com

Evaluation of Amrize structural ½" coarse aggregate
ASTM C330 Testing
CTLGroup Project No. 201522

Dear Mr. Nunley:

As requested, CTLGroup has conducted ASTM C330 testing on the structural ½" coarse lightweight aggregate material provided by you.

The scope of work included testing aggregate samples and concrete specimens in accordance with ASTM C330, *Standard Specification for Lightweight Aggregates for Structural Concrete*. During the testing program, the following tests were conducted (with modifications as specified in ASTM C330, if applicable):

- ASTM C136, *Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates*
- ASTM C114, *Standard Test Methods for Chemical Analysis of Hydraulic Cement*
- ASTM C29, *Standard Test Method for Bulk Density (Unit Weight) and Voids in Aggregate*
- ASTM C142, *Standard Test Method Clay Lumps and Friable Particles in Aggregates*
- ASTM C641, *Standard Test Method for Iron Staining Materials in Light-weight Concrete Aggregates*
- ASTM C127, *Standard Test Method for Relative Density (Specific Gravity) and Absorption of Coarse Aggregate*
- ASTM C151, *Standard Test Method for Autoclave Expansion of Hydraulic Cement*
- ASTM C39, *Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens*
- ASTM C567, *Standard Test Method for Determining Density of Structural Lightweight Concrete*
- ASTM C496, *Standard Test Method for Splitting Tensile Strength of Cylindrical Concrete Specimens*
- ASTM C157, *Standard Test Method for Length Change of Hardened Hydraulic-Cement, Mortar, and Concrete*
- ASTM C666, *Standard Test Method for Resistance of Concrete to Standard Freezing and Thawing*

Concrete mixing and specimen fabrication were conducted in accordance with ASTM C192, *Standard Practice for Making and Curing Concrete Test Specimens in the Laboratory*.

MATERIALS

The provided structural ½" coarse lightweight aggregate was used for chemical composition and physical property tests. In addition, this material was used for fabrication of concrete specimens to evaluate aggregate pop-outs, freeze-thaw resistance, drying shrinkage, equilibrium density, and compressive and tensile strengths. The gradation of as-received aggregate is presented in Table 1.

Table 1 - ASTM C136 gradation

Sieve No.	Cumulative % Retained on Individual Sieve	Cumulative % Passing on Individual Sieve	ASTM C330 Limits for 12.5 mm to 4.75 mm aggregate, % Cumulative Passing on Individual Sieve
3/4"	0.0	100.0	100
1/2"	9.0	91.0	90 – 100
3/8"	34.2	65.8	40 – 80
#4	90.0	10.0	0 – 20
#8	97.1	2.9	0 – 10
Pan	100.0	0.0	--

For concrete batching, a CTLGroup lab stocked Type I/II portland cement, lab stocked fine aggregate, and lab stocked admixture were used in addition to the provided lightweight aggregate.

AGGREGATE TESTING

The results of aggregate specific tests are presented in Table 2.

Table 2 - Summary of Results for Aggregate Testing

Test	Description	Result	ASTM C330 Limit
ASTM C127	SSD Specific Gravity	1.82	--
ASTM C127	Absorption, %	15.8	--
ASTM C641	Staining Stain Index	0	60 Maximum
ASTM C114	Loss on Ignition, %	0.5	5 Maximum
ASTM C142	Clay Lumps and Friable Particles, %	0.2	2 Maximum
ASTM C29	Loose Dry Bulk Density, lb/ft^3	53	55 Maximum

CONCRETE BATCHING

The required quantity of structural ½" coarse aggregate was soaked in water for 72 hours prior to mixing to achieve a saturated condition. Following this, the additional water was allowed to drain from the aggregate container over a period of 24 hours. The wet aggregate was then thoroughly blended, and a test sample was procured and tested for determining the total moisture content. The purpose here was to determine the actual water content required for batching through appropriate moisture corrections. The total amount of potable water was adjusted during mixing to achieve the desired slump as required by ASTM C330 standard. The sequence of concrete mixing was as follows:

- Initial 3 minutes of mixing: lightweight and natural aggregate, cement, water, and admixture
- 3 minutes of rest
- 2 minutes of mixing

One 2x2x11.25-in. nominal prisms and three 3x3x11.25-in. nominal prisms were fabricated for autoclave expansion and shrinkage tests, respectively. In addition, three 3x3x11.25-in. nominal prisms were fabricated for freeze-thaw testing per ASTM C666. Several 6x12-in. nominal concrete cylinders were fabricated to evaluate split tensile strength, and equilibrium density, and three 4x8-in. nominal concrete cylinders were fabricated to evaluate compressive strength. The quantities of different materials used to produce concrete mixture are presented in Table 3.

Table 3 - Mix Proportions (SSD Condition)

Ingredient	Quantity
Cement, lb/yd^3	564
Structural ½" Coarse, lb/yd^3	1300
Natural Concrete Sand, lb/yd^3	1020
Water, lb/yd^3	300
Resulting w/cm ratio	0.53

FRESH CONCRETE PROPERTIES

After mixing, fresh concrete properties were measured as follows:

- Slump according to ASTM C143, *Standard Test Method for Slump of Hydraulic Cement Concrete*
- Unit weight (density) according to ASTM C138, *Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete.*
- Plastic air content according to ASTM C173, *Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method*.

The measured fresh concrete properties are presented in Table 4.

Table 4 - Fresh Concrete Properties

Property	Test Value
Measured Slump, in.	4.00
Unit Weight (Density), lb/ft^3	120.7
Plastic Air, %	6.8

HARDENED CONCRETE PROPERTIES

A summary of the tests results conducted on hardened concrete are presented in Table 5. Note the test procedures adopted for evaluating different concrete properties were modified, if needed, per ASTM C330.

Table 5 - Hardened Concrete Properties

Property	Test Result	ASTM C330 Limits
ASTM C567 Equilibrium Density, lb/ft^3	109.5	105 - 110
ASTM C39 Compressive Strength, psi	4240	3000 Minimum
ASTM C496 Splitting Tensile Strength, psi	425	310 Minimum
ASTM C157 Shrinkage, %	0.03	0.07 Maximum
ASTM C151 Autoclave Expansion, %	No pop outs	No pop outs
ASTM C666 Freeze-thaw Resistance, DF	Pending	Satisfactory Performance

CONCLUSION

The results of the testing program indicate that structural ½" coarse lightweight aggregate material from Amrize – Utelite plant met all limit requirements specified for physical and chemical property tests listed in ASTM C330. An amended version of this letter will be issued once ASTM C666 freeze-thaw testing is complete.

Concrete specimens produced using structural ½" coarse material were evaluated for equilibrium density (ASTM C567), compressive strength (ASTM C39), splitting tensile strength (ASTM C496), pop outs (ASTM C151), freeze-thaw resistance (ASTM C666), and drying shrinkage (ASTM C157). Autoclave expansion of concrete prism specimens indicated no pop outs, indicating that concrete containing structural ½" coarse aggregate met the pop out requirement of ASTM C330. The calculated compressive and splitting tensile strength values were also higher than the minimum limit values imposed by ASTM C330. The calculated shrinkage at a drying age of 28 days was well below the maximum limit specified by ASTM C330.

DISCLAIMER

This report is for the exclusive use of Amrize and is provided on an "as is" basis with no warranties, implied or expressed, including, but not limited to, warranties of merchantability and fitness for a particular purpose, with respect to the professional services being provided. CTLGroup assumes no liability for any loss, expense or damage occasioned by the unauthorized use of this report. Only Amrize is authorized to copy or distribute this report, and then only in its entirety. This report is intended for the use of individuals who are competent to evaluate the significance and limitations of its content and recommendations, and who accept responsibility for the application of the information it contains.

CLOSING

Thank you for considering CTLGroup to assist you on this project. Should you have any questions, please don't hesitate to call or email.

Sincerely,
CTLGroup

Pavan Vaddey, PhD, PE
Senior Engineer
Concrete and Cement-Based Materials
PVaddey@CTLGroup.com
Phone: (541) 602-5859

Attachments: ASTM C330 test reports (11 pages)

Client: **Amrize - Utelite Plant**
Project: **ASTM C330 Qualification**
Contact: **Ken Nunley**
Date: **March 10, 2026**

CTLGroup Project No: **201522**
CTLGroup Project Manager: **P. Vaddey**
Technician: **N/A**
Approved: **R. Marrero**

ASTM C330 Aggregate and Concrete Testing Summary

Client Aggregate ID:	**Structural 1/2" Coarse**
CTLGroup Concrete Mixture ID:	**C330 - 1/2" Coarse**
Date Fabricated:	**February 3, 2026**

Material	Product	SG	*lbs/yd³ (SSD)*
Cement	*ASTM C150 Type I/II, CTLGroup - Lab Stock*	3.15	564
Fine Aggregate	*Concrete Sand, CTLGroup - Lab Stock*	2.62	1020
Coarse Aggregate	*1/2" Coarse Lightweight Aggregate, Amrize, Coalville, UT*	1.82	1300
Water	*Potable, Mount Prospect, IL*	1.00	300
w/cm			0.53

Chemical Admixtures	Product	SG	*fl oz/cwt*
Air-Entraining Admixture	*Master Air AE200*	1.01	0.5

Target Properties	Design Properties
Target Slump, in.	3.00 ± 1.00
Design Air Content, %	6.0 ± 1.0%

Fresh Concrete Properties	Test Method	Test Results
Slump	ASTM C143	4.00
Plastic Air Content, %	ASTM C173	6.8
Temperature, °F	ASTM C1064	72
Fresh Density, lb/ft³	ASTM C138	120.7

Hardened Concrete Performance	Test Method	Curing	Age	Test Results
Calculated Equilibrium Density, lb/ft³	ASTM C567	--	Per ASTM C567	109.5
Compressive Strength, psi	ASTM C39	100% RH, 73°F	28 days	4,240
Splitting Tensile Strength, psi	ASTM C496	73°F/100% RH 7d, 73°F/50% RH 21d drying	28 days	425
Drying Shrinkage, %	ASTM C157/ASTM C330	73°F/100% RH 7d, 100°F/32% RH 28d drying	35 days	0.03
Popouts	ASTM C151/ASTM C330	73°F/100% RH 1d	--	No Popouts

ASTM C330 Specification Requirements for Aggregate Testing

Property	Test Method	ASTM C330 Requirement	Result	Requirement Met?
Gradation	ASTM C136	ASTM C330 Table 1 Coarse Aggregate	See Report	**Yes**
Specific Gravity (SSD)	ASTM C127	--	1.82	**--**
Absorption	ASTM C127	--	15.8%	**--**
Staining	ASTM C641	Stain Index of 60 or less	0	**Yes**
Loss on Ignition	ASTM C114	No greater than 5%	0.5%	**Yes**
Clay Lumps and Friable Particles	ASTM C142	No greater than 2% by dry mass	0.2%	**Yes**
Loose Bulk Density	ASTM C29	No greater than 55 lbs/ft^3	53 lbs/ft^3	**Yes**

ASTM C330 Specification Requirements for Concrete Testing

Property	Test Method	ASTM C330 Requirement	Result	Requirement Met?
Compressive Strength	ASTM C39 / ASTM C330	No less than 3000 psi at 28 days	4,240 psi	**Yes**
Splitting Tensie Strength	ASTM C496 / ASTM C330	No less than 310 psi at 28 days	425 psi	**Yes**
Drying Shrinkage	ASTM C157 / ASTM C330	No greater than 0.07% at 28 days dry	0.03%	**Yes**
Popouts	ASTM C151 / ASTM C330	No Popouts	No Popouts	**Yes**
Freeze-thaw Resistance	ASTM C666 / ASTM C330	Satisfactory Performance	Pending	Pending

Notes:
1) This report may not be reproduced except in its entirety. The report refers specifically to the tested specimens.
2) Concrete test specimens were fabricated by CTLGroup using lab-stocked materials and light weight aggregate provided by the client.
3) THIS REPORT IS NOT INTENDED FOR CONSTRUCTION OR SUBMITTAL

Client:	**Amrize - Utelite Plant**	CTLGroup Project No:	**201522**
Project:	**ASTM C330 Qualification**	CTLGroup Project Manager:	**P. Vaddey**
Contact:	**Ken Nunley**	Technician:	**T. Hercules**
Date Reported:	**March 10, 2026**	Approved:	**P. Vaddey**

ASTM C136 — Standard Test Method for Sieve Analysis of Fine and Coarse Aggregate

Client Sample ID	Structural 1/2" Coarse
CTLGroup Sample ID	6019901
Sample Source	Amrize - Utelite Plant
Aggregate Type	Coarse Aggregate
Weight of Oven Dry Sample, g	654.70

Sieve Size	Retained on Individual Sieve, grams	Retained on Individual Sieve, %	Cumulative Retained on Sieve, %	Cumulative Passing Sieve, %	ASTM C330 12.5 mm to 4.75 mm Cumulative Passing Limits, %
¾"	0.0	0.0	0.0	100.0	100
½"	58.6	9.0	9.0	91.0	90 - 100
⅜"	165.3	25.2	34.2	65.8	40 - 80
#4	365.1	55.8	90.0	10.0	0 - 20
#8	46.8	7.1	97.1	2.9	0 - 10
Pan	18.9	2.9	100.0	0.0	--

Notes:

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2. The results refer specifically to the submited sample.
3. Testing was conducted by Amrize on March 3, 2026.

Client:	**Amrize - Utelite Plant**	CTLGroup Project No:	**201522**
Project:	**ASTM C330 Qualification**	CTLGroup Project Manager:	**P. Vaddey**
Contact:	**Ken Nunley**	Technician:	**T. Hercules**
Date Reported:	**February 2, 2026**	Approved:	**B. Manaugh**

ASTM C142 — Standard Test Method for Clay Lumps and Friable Particles in Aggregates

Client Sample ID	Structural 1/2" Coarse
CTLGroup Sample ID	6019901
Sample Source	Amrize - Utelite Plant

Clay Lumps and Friable Particles	**0.2%**

Notes:

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2. The results refer specifically to the submitted sample.
3. The test sample was received on January, 12, 2026.
4. Testing was conducted on January, 29, 2026.

Client:	**Amrize - Utelite Plant**	CTLGroup Project No:	**201522**
Project:	**ASTM C330 Qualification**	CTLGroup Project Manager:	**P. Vaddey**
Contact:	**Ken Nunley**	Technician:	**T. Hercules**
Date Reported:	**February 2, 2026**	Approved:	**B. Manaugh**

ASTM C127 — Standard Test Method for Relative Density (Specific Gravity) and Absorption of Coarse Aggregate

Client Sample ID	Structural 1/2" Coarse
CTLGroup Sample ID	6019901
Sample Source	Amrize - Utelite Plant

Relative Density (Specific Gravity) at OD[1]	1.57
Relative Density (Specific Gravity) at SSD[2]	1.82
Apparent Relative Density (Apparent Specific Gravity)	2.09

[1] *Oven Dry*

[2] *Saturated-Surface Dry*

Oven-Dry (OD) Density	97.9 lb/ft³
Saturated Surface Dry (SSD) Density	113.3 lb/ft³
Apparent Saturated Surface Dry (SSD) Density	130.2 lb/ft³

Absorption, %	15.8%

Notes:

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2. The results refer specifically to the submited sample.
3. The test sample was received on January, 12, 2026.
4. Testing was conducted from January, 23, 2026 to January, 27, 2026.
5. Density was calculated on the basis of water at 75°F.

Client:	**Amrize - Utelite Plant**	CTLGroup Project No:	**201522**
Project:	**ASTM C330 Qualification**	CTLGroup Project Manager:	**P. Vaddey**
Contact:	**Ken Nunley**	Technician:	**T. Hercules**
Date Reported:	**February 2, 2026**	Approved:	**B. Manaugh**

ASTM C29 — Bulk Density ("Unit Weight") and Voids in Aggregates

Client Sample ID	Structural 1/2" Coarse
CTLGroup Sample ID	6019901
Sample Source	Amrize - Utelite Plant

Aggregate Type	Coarse Aggregate
Procedure	Shoveling
Size of Measure	0.50 ft^3

Bulk Density	**53 lbs/ft^3**

Notes:

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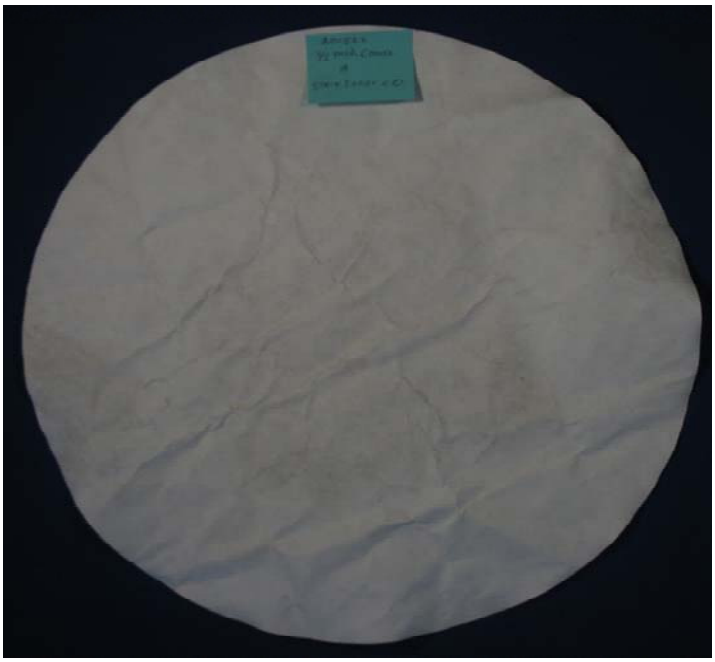
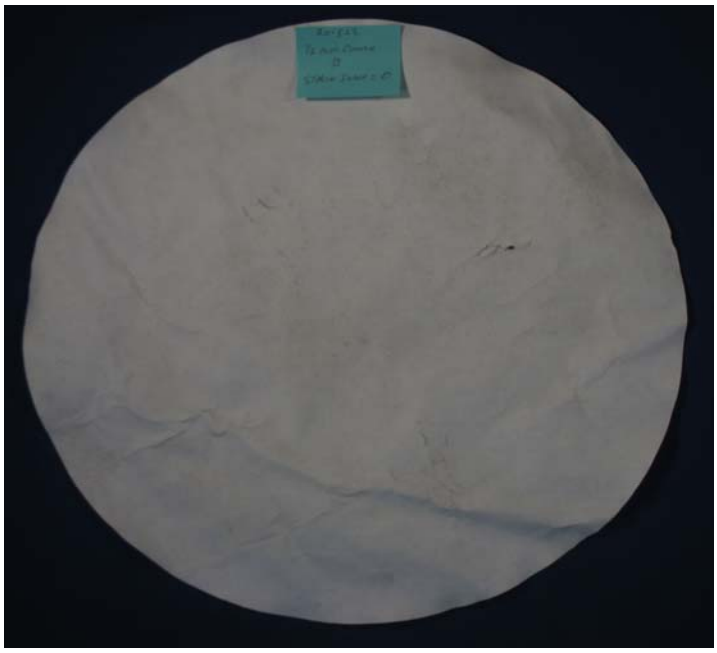
2. The results refer specifically to the submitted sample.
3. The test sample was received on January, 12, 2026.
4. Testing was conducted on January, 26, 2026.

Client:	**Amrize - Utelite Plant**	CTLGroup Project No:	**201522**
Project:	**ASTM C330 Qualification**	CTLGroup Project Manager:	**P. Vaddey**
Contact:	**Ken Nunley**	Technician:	**T. Hercules**
Date Reported:	**February 2, 2026**	Approved:	**B. Manaugh**

ASTM C641
Standard Test Method for Iron Staining Materials in Lightweight Concrete Aggregate

Client Sample Identification	Structural 1/2" Coarse
CTLGroup Sample Identification	6019901
Sample Source	Amrize - Utelite Plant
Procedure	Visual Procedure
Stain Index	**0**





Notes:

1. Results refer specifically to the sample submitted.
2. Visual rating based on standard index images presented in ASTM C641.
3. This report may not be reproduced except in its entirety.

Client:	**Amrize - Utelite Plant**	CTLGroup Project No:	**201522**
Project:	**ASTM C330 Qualification**	CTLGroup Project Manager:	**P. Vaddey**
Contact:	**Ken Nunley**	Technician:	**T. Hercules**
Date Reported:	**February 10, 2026**	Approved:	**B. Manaugh**

ASTM C567
Standard Test Method For Determining Density of Structural Lightweight Concrete

Mixture ID: C330 - 1/2" Coarse

Sample	Mass of Oven Dry Cylinder, lbs	Mass of Saturated Surface-Dry Cylinder, lbs	Apparent Mass of Suspended-Immersed Cylinder, lbs	Measured Oven-Dry Density, lb/ft³	Calculated Equilibrium Density, lb/ft³
C330 - A	21.1	24.2	11.9	106.6	109.6
C330 - B	21.2	24.3	11.9	106.6	109.6
C330 - C	21.2	24.2	11.8	106.5	109.5
Average (Rounded to the nearest 0.5 lbs/ft^3)				**106.5**	**109.5**

Notes:

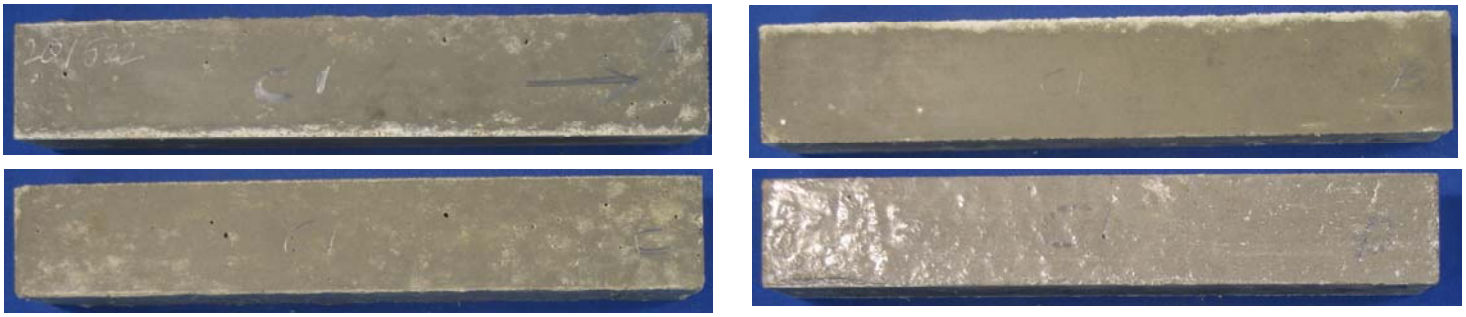
1. This report may not be reproduced except in its entirety.
2. Specimens were cast by CTLGroup with materials provided by others.

Client:	**Amrize - Utelite Plant**	CTLGroup Project No:	**201522**
Project:	**ASTM C330 Qualification**	CTLGroup Project Manager:	**P. Vaddey**
Contact:	**Ken Nunley**	Technician:	**M. Baig**
Date Reported:	**February 19, 2026**	Approved:	**B. Manaugh**

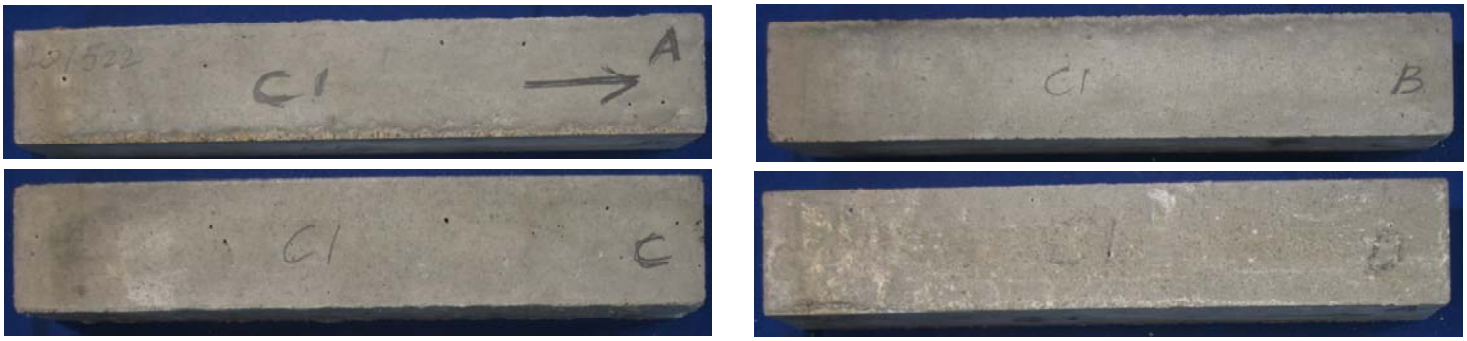
ASTM C151 as Modified by ASTM C330
Test for Popout Materials

Client Mixture Identification	N/A
CTLGroup Mixture Identification	C330 - 1/2" Coarse
Aggregate Sample Source	Amrize - Utelite Plant
Aggregate Description	Coarse Aggregate
Result	**No Popouts Observed**

Specimen surfaces before Autoclave Testing



Specimen surfaces after Autoclave Testing



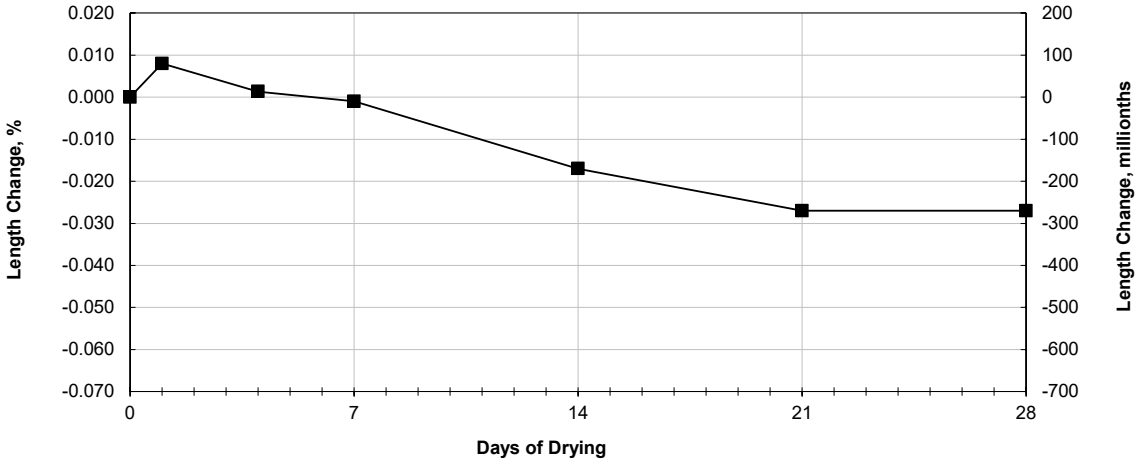
Notes:

1. Test specimen was fabricated in accordance with ASTM C330. Test specimen was a 2x2x11.25-in. nominal prism.
2. Autoclave testing was performed in accordance with ASTM C151.
3. Results refer specifically to the aggregate sample submitted.
4. This report may not be reproduced except in its entirety.

Client:	**Amrize - Utelite Plant**	CTLGroup Project No:	**201522**
Project:	**ASTM C330 Qualification**	CTLGroup Project Manager:	**P. Vaddey**
Contact:	**Ken Nunley**	Technician:	**M. Klaric**
Report Date:	**March 10, 2026**	Approved:	**R. Marrero**

ASTM C157/C157M as Modified by ASTM C330
Standard Test Method for Length Change of Hardened Hydraulic-Cement Mortar and Concrete

Mix ID: C330 - 1/2" Coarse



				Comparator Measurement, in.			*Length Change, %*			**Average, %**	*Length Change, millionths*			**Average, millionths**
Date	Age, days	Days of Drying	Condition	A	B	C	A	B	C		A	B	C	
2/10/2026	7	0	Start dry	-0.0901	-0.0844	-0.0869	0.000	0.000	0.000	**0.000**	0	0	0	**0**
2/11/2026	8	1	Dry	-0.0893	-0.0836	-0.0861	0.008	0.008	0.008	**0.008**	80	80	80	**80**
2/14/2026	11	4	Dry	-0.0899	-0.0843	-0.0868	0.002	0.001	0.001	**0.001**	20	10	10	**13**
2/17/2026	14	7	Dry	-0.0902	-0.0845	-0.0870	-0.001	-0.001	-0.001	**-0.001**	-10	-10	-10	**-10**
2/24/2026	21	14	Dry	-0.0919	-0.0859	-0.0887	-0.018	-0.015	-0.018	**-0.017**	-180	-150	-180	**-170**
3/3/2026	28	21	Dry	-0.0929	-0.0867	-0.0899	-0.028	-0.023	-0.030	**-0.027**	-280	-230	-300	**-270**
3/10/2026	35	28	Dry	-0.0929	-0.0867	-0.0899	-0.028	-0.023	-0.030	**-0.027**	-280	-230	-300	**-270**

Notes:

1. Specimens were fabricated by CTLGroup in accordance with the requirements of ASTM C330.
2. Test specimens were 3x3x11.25-in. concrete prisms.
3. After demolding, specimens were stored at 73°F ± 3°F and 100% RH for 7 days, then stored in a controlled environment kept nominally at 100°F ± 3°F and 32 ± 4% RH for the remainder of the test.
4. Length change calculated based on specimen length at the start of drying (at the age of 7 days).
5. This report might not be reproduced except in its entirety.

Client:	**Amrize - Utelite Plant**	CTLGroup Project No:	**201522**
Project:	**ASTM C330 Qualification**	CTLGroup Project Manager:	**P. Vaddey**
Contact:	**Ken Nunley**	Technician:	**M. Klaric**
Report Date:	**March 3, 2026**	Approved:	**R. Marrero**

ASTM C39 and AASHTO T 22
Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Specimen Identification

CTLGroup Mixture Identification	C330 - 1/2" Coarse		
Client Mixture Identification	N/A		
Casting Date	2/3/2026	2/3/2026	2/3/2026
Test Date / Time	3/3/2026	3/3/2026	3/3/2026
Loading Rate, psi/sec	35	35	35

Concrete Description

Concrete Age at Test, days	28	28	28
Moisture Condition at Test	SSD	SSD	SSD
Curing Conditions (Temp/RH)	73°F / 100% RH	73°F / 100% RH	73°F / 100% RH
Cylinder End Preparation	Ground	Ground	Ground

Concrete Dimensions

Diameter 1, in.	4.01	4.00	4.00
Diameter 2, in.	4.03	4.02	4.02
Length, in.	7.87	7.91	7.93
Average Diameter, in.	4.02	4.01	4.01
Length / Diameter (L/D)	1.96	1.97	1.98
Cross-Sectional Area, in²	12.69	12.63	12.63

Compressive Strength and Fracture Pattern

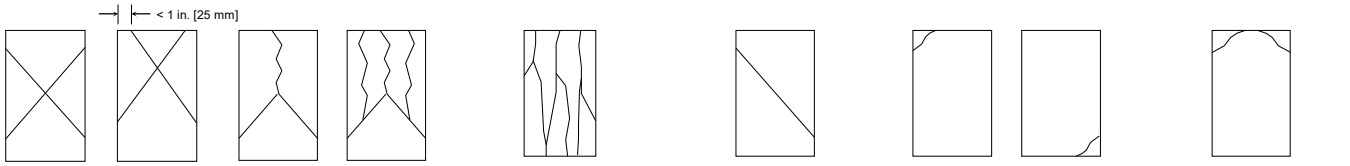
Maximum Load, lb	54,680	53,595	52,678
Compressive Strength, psi	4,310	4,240	4,170
Fracture Pattern	Type 1	Type 4	Type 4

Average Compressive Strength, psi	**4,240**

Notes:

1. This report may not be reproduced except in its entirety.
2. The results specifically refer to the tested specimens.
3. Specimens were cast by CTLGroup. Mixture proportions are summarized in ASTM C330 summary sheet.
4. One day after cast, specimens were stored in moist room maintained at 73°F until testing.

Schematic of Typical Fracture Patterns



Type 1
Reasonable well-formed cones on both ends, less than 1 in. [25 mm] of cracking through caps

Type 2
Well-formed cone on one end, vertical cracks running through caps, no well-defined cone on other end

Type 3
Columnar vertical cracking through both ends, no well-formed cones

Type 4
Diagonal fracture with no cracking through ends; tap with hammer to distinguish from Type I

Type 5
Side fractures at top or bottom (occur commonly with unbounded caps)

Type 6
Similar to Type 5 but end of cylinder is pointed

Client:	**Amrize - Utelite Plant**	CTLGroup Project No:	**201522**
Project:	**ASTM C330 Qualification**	CTLGroup Project Manager:	**P. Vaddey**
Contact:	**Ken Nunley**	Technician:	**M. Klaric**
Date Reported:	**March 3, 2026**	Approved:	**R. Marrero**

ASTM C496
Standard Test Method for Splitting Tensile Strength of Cylindrical Concrete Specimens

Specimen Identification

CTLGroup Mixture Identification	C330 - 1/2" Coarse							
Client Mixture Identification	N/A							
Casting Date	2/3/2026	2/3/2026	2/3/2026	2/3/2026	2/3/2026	2/3/2026	2/3/2026	2/3/2026
Test Date	3/3/2026	3/3/2026	3/3/2026	3/3/2026	3/3/2026	3/3/2026	3/3/2026	3/3/2026
Type of Specimen	Concrete Cylinder	Concrete Cylinder	Concrete Cylinder	Concrete Cylinder	Concrete Cylinder	Concrete Cylinder	Concrete Cylinder	Concrete Cylinder
Defects in Specimen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Concrete Description

Concrete Age at Test, days	28	28	28	28	28	28	28	28
Curing Conditions	Per ASTM C496	Per ASTM C496	Per ASTM C496	Per ASTM C496	Per ASTM C496	Per ASTM C496	Per ASTM C496	Per ASTM C496
Moisture Condition at Test	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry

Concrete Dimensions

Diameter 1, in.	5.99	5.99	5.99	5.98	5.98	5.98	5.99	5.99
Diameter 2, in.	6.06	6.04	6.02	6.06	6.02	6.05	6.02	6.06
Diameter 3, in.	6.09	6.07	6.04	6.02	6.02	6.07	6.02	6.02
Length 1, in.	12.14	12.05	12.02	12.00	12.07	12.09	12.04	12.05
Length 2, in.	12.12	12.04	12.04	12.00	12.01	12.09	12.02	12.06
Average Diameter, in.	6.05	6.03	6.02	6.02	6.01	6.03	6.01	6.02
Average Length, in.	12.10	12.00	12.00	12.00	12.00	12.10	12.00	12.10

Strength and Fracture Pattern

Maximum Load, lbf	48,173	54,396	47,574	42,967	57,469	50,118	45,744	39,174
Splitting Tensile Strength, psi	420	480	420	380	505	435	405	340
Type of Fracture	Vertical Center	Vertical Center	Vertical Center	Vertical Center	Vertical Center	Vertical Center	Vertical Center	Vertical Center
Estimated Proportion of Coarse Aggregate Fractured during Test	100%	100%	100%	100%	100%	100%	100%	100%

Average Splitting Tensile Strength	**425 psi**

Notes:

1. Specimens were fabricated by CTLGroup.
2. Mixture proportions are summarized in ASTM C330 summary sheet.
3. One day after cast, specimens were stored in moist room maintained nominally at 73°Funtil test.
4. This report may not be reproduced except in its entirety. The results refer specifically to the submitted specimens.