



CMATS User Guide

User Manual

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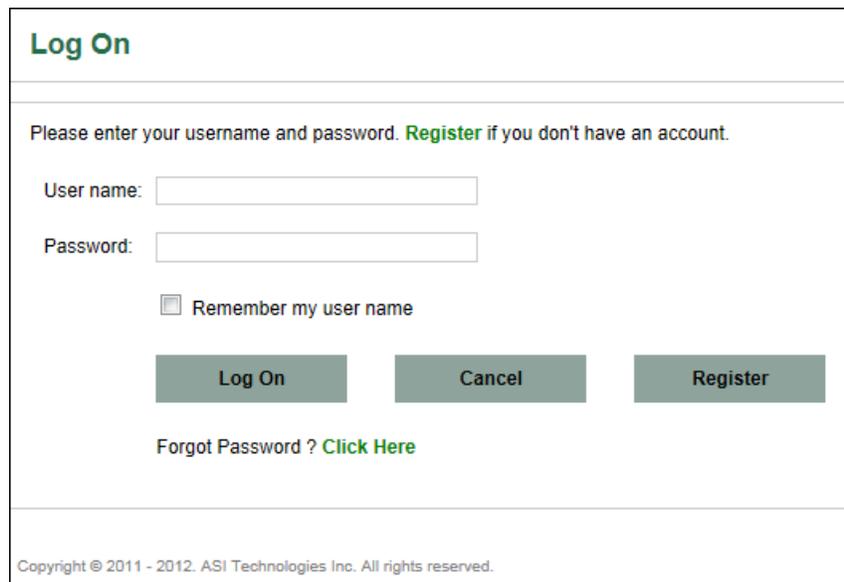
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Introduction to CMATS™

About CMATS™

CMATS™ is a partnership between several organizations with an interest in promoting quality as it relates to construction materials that go into our infrastructure. CMATS™ was developed to facilitate the collection, sharing and reporting of “quality information” using contemporary information technology tools and to ensure widespread availability of those tools to industry practitioners at a reasonable cost.



Log On

Please enter your username and password. [Register](#) if you don't have an account.

User name:

Password:

Remember my user name

[Log On](#) [Cancel](#) [Register](#)

Forgot Password ? [Click Here](#)

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What is CMATS™?

CMATS™ is a secure web-based business application that streamlines the collection, distribution and reporting of material test data for organizations. By using CMATS™, organizations can record, distribute, and view test data for owners, architects, engineers, testing companies, contractors and material suppliers on a project by project basis. CMATS™ streamlines the process and makes these interactions seamless and manageable through an Internet connection.

How Does The CMATS™ Process Work?

Organizations sign-up and login to CMATS™ and identify their projects and team members involved in each project. Each team member is sent a notification of the new project, and is issued a UserID and Password for CMATS™ (if one has not been issued previously). Each of the team members then uses their web browser to connect to the CMATS™ application to view the activity of the team and the applicable tests. (Users can only view the projects to which they have been assigned rights.) The CMATS™ program allows the user to select projects, view data such as AVS and RCP results, and download a copy in PDF or CSV format. In its simplest form,

CMATS™ replaces the existing paper reporting system with an electronic version of the data. However, if the users require hard copies of the information they can print a copy.

What Will CMATS™ Do For Me?

Since the CMATS™ system is completely electronic; it will provide both test information and additional quality control tools instantly to all members of the project. There are specific advantages for the various people and companies from reducing overhead for owners, increasing quality assurance and quality control for architects, engineers and labs, to maximizing resources for contractors and suppliers.

Owners:

- Test results integrate with payment calculations and project reports to help reduce cost
- Instant access to project data through the internet
- Allows for the identification of trends and statistical analysis for future development

Architects/Engineers:

- Ensures all construction team members are receiving quality assurance (QA) test data instantly and allows them to react appropriately to help reduce cost
- Instant access to project data through the internet
- Allows for identification of trends and statistical analysis for future development
- Optimizes material changes to ensure product quality
- Electronic storage of all project test data

Testing Companies:

- Eliminates paper handling costs (faxing and mailing)
- Standardizes reporting procedures for the industry
- Eliminates repetitive data entry and inefficient communication on large projects
- Ensures that a secure, electronic backup exists at a secondary off-site location
- Allows for electronic searches for specific test data
- Electronic information can be downloaded into existing computer systems
- Provides basic statistical analysis tools for clients
- Provides quality control (QC) features for ensuring quality of testing and product
- Can export to CD storage of all completed project test data by the testing company

Contractors/Material Suppliers:

- Ensures that the construction team has the necessary QA test data
- Shortens cost delay, and increases job site reaction times
- Minimizes job site specification compliance issues
- Improves the quality of the finished product
- Allows multi-location access by multiple users
- Download features allows QA test data to be combined with QC test data for further statistical and trend analysis.

Accessing CMATS™

Before you can use CMATS™ to its full potential, you must meet the following criteria:

- Unpaid projects maybe set up, but no test data may be entered or changed. CMATS is a cost per project fee system. Please refer to our [price guide](#).
- Projects can be unlocked (paid) as part of the project creation process, or from the Profile > Projects screen
- Project keys (licenses) can be purchased in advance (bulk) from the Profile > Project screen

Creating Your Profile

CMATS™ is a user-friendly process to start, use, and navigate around. The first step is creating your Profile Administrator. Go to the CMATS™ website, and register your company.

- Click Register
- Enter your company/organization's name and email address
- Click Submit

You will be prompted to select an existing organization in case your company has been registered in the past. If it has, and you are not the Profile Administrator, you will have to talk to your company's admin contact, or contact CMATS™ support.

New User Sign Up

You might already be in CMATS. Enter your company / organization name and email address below. The database will be searched.

Company / Organization Name:

Email:

If your company is not registered, click Add New, and fill in data as required. Once you register and login to CMATS™, you should click Profile to continue building your organization profile. Please refer to the Profile section of the manual for assistance as needed.

Setting Up a New Project

Once you have created your profile, you will need to setup your project. You will start the process by clicking New Project on the menu bar to launch the Project Create screen.



Creating a New Project

A screenshot of a web form titled 'Project Create'. The form contains several input fields: 'Project / Contract #' with the value '154-1589Craven.Rd', 'Project Name*' with the value 'Craven Rd Upgrade 2014-02-01 x', 'Location*' with the value 'Brampton, ON', and 'CMATS Administrator' with a dropdown menu showing 'ASI Technologies Inc.'. Below these are checkboxes for 'Material Type*': 'Concrete', 'Marshall Asphalt', 'Superpave Asphalt' (checked), and 'Aggregate' (checked). At the bottom of the form are two buttons: 'Save' and 'Cancel'. A small asterisk and the text '* Required Fields' are located at the bottom left of the form area.

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After clicking New Project you will be taken to the Project Create screen to start adding information that is vital to your project: add Project/Contract #, Project Name, Location, select CMATS™ Administrator and Material Types. Once all the information is entered and double checked, please click Save to navigate to the Organizations in Project Screen.

Project Organization

(Project > Project Team > Organizations)

When creating a new project, this window will be blank. It is from this window you will add, manage, and remove organizations, and their roles.

In the case of a new project, you will click Add Organization button which will navigate you to the Find Organization window. (You may wish to click Search first to ensure yours and other organizations involved in the project do not exist in the database.)

Contacts in the Project Team are assigned roles and permissions according to the roles and permissions assigned to an Organizations's Contacts. Organizations in a Project is a description of the companies involved and their roles in the Project. Every Organization on a Project must have at least one Contact on the Project, and you are not allowed to delete a Contact until a second Contact is added. Please note: when an Organization is first added to a project, you must select a Contact for that Organization; if the same Organization is added a second time, (eg. for a different role), you will not be forced to select a Contact.

Organizations in Project CMATS Project #: 205
Project / Contract #: 2012-0516
Project Name: Clintwood Street Underpass

Organization Name		Project Role	Material Type
Bravo Labs	✗	Testing Laboratory	Concrete
	✗	Testing Laboratory	Superpave Asphalt
	✗	Testing Laboratory	Aggregate

Add Organization

To add existing organizations, enter the name or part of the name of the Organization text field involved, click Search and an organization list will generate. Once the list is generated, select the organization to be taken to the Project Team - Organization screen.

Find Organization CMATS Project #: 205
Project / Contract #: 2012-0516
Project Name: Clintwood Street Underpass

Organization:

Search Results:

	Organization
Select	Blue Circle Aggregates Canada
Select	Blue Ridge Rubber Co.
Select	Blue Water Bridge Authority
Select	Town of The Blue Mountains
Select	Bluedog Steel Products Inc.
Select	Bluewater Optics
Select	Municipality of Bluewater
Select	Uni-Bell PVC Pipe Association (Uni-Bell)
Select	American Ball-Aire Corp.
Select	Bel Products Inc.

Here you can select a predefined¹ Project Role, such as Owner, Architect, Engineer, Testing Laboratory, Material Supplier, Contractor, or Sub-Contractor. Depending on the role, you may have to select Material Type, e.g., you would not need to select Material type for Owner, but you would for Material Supplier. If you need to remove a Project Role, in the Organizations in Project window, click on the delete button to the left of the Project Role.

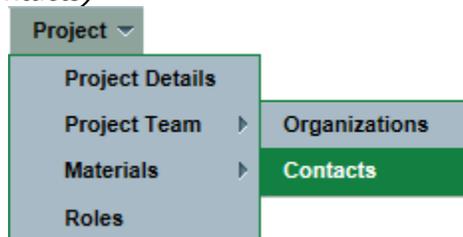
To add a new organization to the project, click Add New Organization, and enter details as needed.

¹ The predefined roles cannot be edited and have predetermined settings for Notify, Distribution, All Materials, and Clearance Level.

Organization*:	<input type="text"/>
Street*:	<input type="text"/>
City*:	<input type="text"/>
Country:	<input type="text"/>
Province/State:	<input type="text"/>
Post Code:	<input type="text"/>
Prefix:	<input type="text"/>
First Name*:	<input type="text"/>
Last Name*:	<input type="text"/>
Suffix:	<input type="text"/>
Title:	<input type="text"/>
Email*:	<input type="text"/>
Telephone:	<input type="text"/>
Fax:	<input type="text"/>

Contacts in Project

(Project > Project Team > Contacts)



For new organizations, this screen will be. It is from this window you will add, edit, and remove contacts (project team members).

On this screen you will see the list of people involved and you can change their Project Role, Material Types (if applicable), Notification Settings, Distribution List for printed reports, and Clearance Level. If you need to remove a Team Role, in the Project Team window, click on the delete button to the left of the Team Role.

Contacts in Project

CMATS Project #: 205
 Project / Contract #: 2012-0516
 Project Name: Clintwood Street Underpass

Contact Name	Email	Organization		Project Role	Material Type	Clearance Level	*
Bert Brubacher	be...	Bravo Labs	✖	Testing Laboratory	Concrete	Data Certifier	
			✖	Testing Laboratory	Superpave Asphalt	Data Certifier	
			✖	Testing Laboratory	Aggregate	Data Certifier	

* : Notify : Include on Distribution List

Add Contact
Back

To add a team member, click Add Contact to launch the Find User screen, select the organization, and click Search to populate all contacts associated with the organization in the Search Result window. In the Search Result window, click on the name of the person and this will launch the Project Team - Contact Create screen.

Project Team - Contact

User Name:

Organization Name:

Project Role:

Material Type:

Clearance Level:

Send Notification:

Include on Distribution:

Save
Cancel

On the Project Team – Contact Create screen you will select Project Role², choose Send Notification if needed, choose Include on Distribution List if needed, Clearance Level, Material Type (if applicable), and click Save. If you need to edit a member, select Edit to launch Project Team – Contact Edit.

When you have finished adding contacts, click Next to finish setting up your project.

² If the Team Role you desire is not listed here, then you will need to create it in Project Roles.

Project Set Up Successfully

CMATS Project#: 252
Project / Contract #: 111
Project Name: 111
 Project Locked

Your project has been set up successfully. You will now be redirected to the Project Detail screen. From there, you can make changes to the project team as required. To enter test data, you must first create Mix Designs for each material.

Please Note: this project is currently Locked. A valid key must be applied in order to enter data. You may set up the project while it is locked, but you may not enter any test data. To unlock the project, click Unlock Project button below.

Back

Next

Unlock Project

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Please note: if the project is locked, a valid key must be applied in order to enter data. You may set up the project while it is locked, but you may not enter any test data.

The CMATS™ Data Process

This section will cover adding, updating, editing, and certifying test data as needed for each Mix Design.

Adding Mix Designs, Aggregate Specifications, and Tests to a Project

There are four materials you can add in CMATS™: Concrete, Marshall Asphalt, Superpave Asphalt, and Aggregates. Each material requires that Mix Designs or Specifications be entered into the system to proceed with testing. Each material type offers up to four unique tests.

Concrete

There are four test types for Concrete: Concrete Strength, Rapid Chloride Permeability Test (RCP), Air Void System (AVS), and Concrete Shrinkage. Before you can enter or view test results, you must ensure the following exist:

- A material supplier under your project team's organizations to create a Mix Design
- A Mix Design must exist to enter data into the system

Adding a Concrete Mix Design

(Project > Materials > Concrete)

To add a concrete mix design, from the drop down menu select Project > Materials > Concrete to launch the Concrete Mix Designs screen. To add a mix design, click Add New to launch the Concrete Mix Design screen. On this screen you will add Mix Design Code/Name, select Supplier, add Application, CSA Exposure Class, and add other pertinent data, and click Save (if there is a mistake, you can click Cancel). Once you click Save, you can review, and edit your mix design if needed. When done, click Back to add another concrete mix design. The Add New Supplier button allows for a material supplier to be added to this Concrete Mix Design. If you wish to review your mix designs, go to the mix design screen, select your mix design, and hit Go.

Adding a Concrete Supplier

You can add a new supplier to an existing mix, or a new mix. To add a supplier to an existing mix, click on the Mix Code, click Edit, click Add New Supplier. Search for an existing Organization by entering in the name or part of the name, and click Search. Please Note: if the organization does not exist then click Add New Organization and enter details as needed.

Enter Concrete Strength Test

(Enter New Test > Concrete > Strength)

To add a concrete strength test result, from the drop down menu select Enter New Test > Concrete > Strength to launch the Concrete Compressive Strength Test screen. Select and fill in pertinent data, and click Save. (Please note: you cannot delete a certified sample.)

Select Project New Project Project View Tests Enter New Test Import and Export Profile Help

CMATS Project #: 100
 Project / Contract #: Cato 01.Project.2011.08.10.02
 Project Name: Cato 01.Project.2011.08.10.02

Concrete Compressive Strength Test

Test #:

Test Type:

Testing Lab*:

Contractor*:

Mix. Code/Name:

Spec Strength:

Location on Structure:

Plant Location:

Date Cast:

Time Mixer Charged:

Time Cast:

Cast By: Representing:

Date Received in Lab:

Owner:

Architect:

Engineer:

Supplier:

Sample Location:

Truck Number:

Load Number:

Load Size (m³):

Ticket Number:

Transported To Lab By:

Lat:

Long:

Plastic Properties	Test	Spec
Slump (mm):	<input type="text" value="2"/>	1 - 11
Initial Slump (mm):	<input type="text" value="3"/>	1 - 11
T ₅₀ Slump Flow Time (sec):	<input type="text" value="2"/>	1 - 11
Slump Flow (mm):	<input type="text" value="1"/>	1 - 1
Air Content (%):	<input type="text" value="1.25"/>	1.0 - 11.0

Size and Type of Mould:

Nominal Aggregate Size (mm):

Air Temperature (°C):

Concrete Temperature (°C):

Initial Curing Temperature (°C): Min: Max:

Admixture Added*: Yes No Admixture Type:

Water Added on Site*: Yes No Water Added (L):

Authorized By:

Technician:

[Add New Cylinder](#)

	Cyl. No	Date Received in Lab	Date Tested	Age (Days)	Density (kg/m ³)	T.O.F.**	Cure	Strength (MPa)	Comments
✗	<input type="text"/>	<input type="text" value="06 Feb 2014"/>	<input type="text" value="06 Feb 2014"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Select ..."/>	<input type="text" value="Lab"/>	<input type="text"/>	<input type="text"/>
✗	<input type="text"/>	<input type="text" value="06 Feb 2014"/>	<input type="text" value="06 Feb 2014"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Select ..."/>	<input type="text" value="Lab"/>	<input type="text"/>	<input type="text"/>

** T.O.F.: Type of Fracture [View Detail Description](#)

Field tested in accordance with CSA

Laboratory tested in accordance with CSA

Notes:

* Required Fields

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Enter Rapid Chloride Permeability (RCP) Test

(Enter New Test > Concrete > RCP)

To add a RCP test result, from the drop down menu select Enter New Test > Concrete > RCP to launch the Rapid Chloride Permeability (RCP) Test screen. Select and fill in pertinent data, and click Save. (Please note: you cannot delete a certified sample.)

Select Project | New Project | Project | View Tests | Enter New Test | Import and Export | Profile | Help

CMATS Project #: 100
Project / Contract #: Cato.01.Project.2011.08.10.02
Project Name: Cato.01.Project.2011.08.10.02

Rapid Chloride Permeability (RCP) Test

Test #:

Test Type:

Testing Laboratory*:

Contractor*:

Mix Code/Name:

Spec Strength:

Cement Type:

Location on Structure:

Date Cast:

Time Mixer Charged:

Time Cast:

Truck Number:

Date Received in Lab:

Owner:

Architect:

Engineer:

Supplier:

Sample Method:

Sample Location: Lat: Long:

Cast By: Representing:

Load Number:

Load Size (m³):

Ticket Number:

Plastic Properties	Test	Spec
Slump (mm):	<input type="text"/>	1 - 11
Initial Slump (mm):	<input type="text"/>	1 - 11
T ₅₀ Slump Flow Time (sec):	<input type="text"/>	1 - 11
Slump Flow (mm):	<input type="text"/>	1 - 1
Air Content (%):	<input type="text"/>	1.0 - 11.0

Size and Type of Mould:

Nominal Aggregate Size (mm):

Air Temperature (°C):

Concrete Temperature (°C):

Initial Curing Temperature (°C): Min: Max:

Admixture Added*: Yes No Admixture Type:

Authorized By:

Water Added on Site*: Yes No Water Added (L):

Authorized By:

Add Sample

Sample Number*	Average Thickness (mm)*	Date Tested*	Age Tested (Days)*	Unit Weight (kg/m ³)*	Charge Passed (coulombs)*
<input type="text"/>	<input type="text"/>	<input type="text" value="06 Feb 2014"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="06 Feb 2014"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Notes:

* Required Fields

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You can sort viewing by Mix Design, New Tests, or Updated Tests. To review a test result, click on the auto-generated CMATS Test #.

Enter Hardened Air Voids (AVS) Test

(Enter New Test > Concrete > AVS)

To add an AVS test result, from the drop down menu select Enter New Test > Concrete > AVS to launch the Hardened Air Voids (AVS) Test screen. Select and fill in pertinent data, and click Save. (Please note: you cannot delete a certified sample.)

You can sort viewing by Mix Design, New Tests, or Updated Tests. To review a test result, click on the auto-generated CMATS Test #.

Select Project | New Project | Project | View Tests | Enter New Test | Import and Export | Profile | Help

Hardened Air Voids (AVS) Test CMATS Project #: 100
Project / Contract #: Cato.01.Project.2011.08.10.02
Project Name: Cato.01.Project.2011.08.10.02

Test #:

Test Type: Quality Assurance

Testing Lab*: ASI Technologies Inc.

Contractor*: Select ...

Mix Code/Name: Cato.01.CMD.2011.08.10.01

Sample Method: Cast

Date Sampled: 06 Feb 2014

Sampled By:

Sample Location: Lat: Long:

Date Received in Lab: 06 Feb 2014

Ticket Number:

Slump (mm):

Plastic Air Content (%):

Hardened Air Content (%):

Specific Surface (mm²):

Spacing Factor (mm):

Notes:

Save Cancel

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Enter Concrete Shrinkage Test

(Enter New Test > Concrete > Shrinkage)

To add a concrete shrinkage test result, from the drop down menu select Enter New Test > Concrete > Shrinkage to launch the Shrinkage (Length Change) of Hardened Concrete Test screen. Select and fill in pertinent data, and click Save. Please note: you can add a new concrete shrinkage test from an existing shrinkage test.

Please note: there are three sections for creating a Shrinkage test:

- The base information which is the test number, mix design, time and date of cast, and so on
- Samples is the base information for the samples - the Original and Initial measurements. Please note: this data does not need to be entered during creation.

Samples: [Add New](#)

Original Comparator Reading (in): Initial Comparator Reading (in):

Sample No	Original		Initial	
	Length (in):	Comparator (in):	Length (in):	Comparator (in):
1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Notes:

By default there are three samples, and if you need to add more, click Add New for an additional line to be added.

- Sample Details is a separate window where you add the specifics of a sample's measurements per Drying Age. Please note: this data does not need to be entered during creation.

To edit the sample data, click on the Sample Number

[Add New Sample](#) [Add New Measurement Per Drying Age](#)

	Sample Number	Original Length (in.)	Original Comparator	Initial Reading (in.)	Initial Comparator R	Expansion (%)
	<u>1</u>	21.0000	43.0000			2.000
	<u>2</u>	21.2000	43.0000			2.200
	<u>3</u>	21.5000	43.0000			2.500

By default a sample has six dates for the Drying Age. If you need to add more, click Add Sample Measurement

Once you have saved the data, you can add more samples, and Add New Measurement Per Drying Age. (Please note: you cannot delete a certified sample.)

Test Concrete Shrinkage Sample

CMATS Project #: 100
Project / Contract #: Cato.01.Project.2011.08.10.02
Project Name: Cato.01.Project.2011.08.10.02

Test #: Cato.01.SHCT.01
CMATS Test #: 117
Mix Code/Name: Cato.01.CMD.2011.08.10.01
Date Cast: 20 Aug 2013
Start of Drying: 27 Aug 2013
Gauge Length (inches): 10.0

Sample Info

Sample Number*: Original Comparator Reading (in)*:

Original Length (in)*:

Sample Measurement [Add Sample Measurement](#)

	Date Tested	Drying Age	Sample Reading (in)	Comparator Reading (in)	Notes
	27 Aug 2013	<input type="text" value="0"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	28 Aug 2013	<input type="text" value="1"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	31 Aug 2013	<input type="text" value="4"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	03 Sep 2013	<input type="text" value="7"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	10 Sep 2013	<input type="text" value="14"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	24 Sep 2013	<input type="text" value="28"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

* Required Fields

Concrete Shrinkage Data Entry

Depending on how the laboratory is entering the data, concrete shrinkage can be entered in two ways: Progressively; All at Once.

Progressively is entering data into CMATS during the test. Samples can be entered when they are cast. As the measurements are taken, at 0, 1, 4, 7, 14, and 28 days, the measurements for

that day are entered. The data entry form used on each of those days is the "Add New Measurements Per Drying Age" form, which allows the entry of the measurements for all of the samples at the same time, for one particular drying age.

All at Once means all measurements for the test, including the final 28-day measurements, are complete before data is entered into CMATS. The data entry form used for these is the per-sample form which includes all the measurements for a single sample for every drying age.

The basics of the test are logged before the individual enters the per-test per-day measurements. To start, fill out the form for the new test, and after submitting the initial form:

- If entering progressively, click "Add New Measurement Per Drying Age" whenever there are new tests to be entered.
- If entering all at once, in the grid of samples, click on the sample number, then click the "Edit" button.

Marshall Asphalt

There are two test types for Marshall Asphalt: Mix Properties and Compaction. Before you can enter, or view test result, you must enter a mix design first.

Adding a Marshall Asphalt Mix Design

(Project > Materials> Marshall Asphalt)

To add a Marshall Asphalt Mix design, from the drop down menu select Project > Materials> Marshall Asphalt to launch the Marshall Asphalt Mix Designs screen. To add a mix design, click Add New to launch the Marshall Asphalt Mix Design screen. On this screen you will add Mix Design Code/Name, select Supplier, add Application, and other pertinent data, and click Save. If there is a mistake, you can click Cancel. Once you click Save, you will be able to add extra Sieve information, and click Save. Once you click Save, you can review, and edit your mix design if needed. When done, click Back to add another concrete mix design.

If you wish to review your mix designs, go to the mix design screen, select your mix design, and hit Go.

Enter Marshall Asphalt Mix Properties Test

(Enter New Test > Marshall Asphalt > Mix Properties)

To add a Marshall Asphalt Mix Properties test result, from the drop down menu select Enter New Test > Marshall Asphalt > Mix Properties to launch the Asphalt Marshall Test screen.

Marshall Asphalt Properties Test CMATS Project #: 100
Project / Contract #: Cato.01.Project.2011.08.10.02
Project Name: Cato.01.Project.2011.08.10.02

Test #:

Test Type:

Mix Code/Name:

Location:

Date Received*:

Date Tested*:

Station:

Offset:

Thickness (mm):

BRD:

MRD:

Testing Lab*:

Contractor*:

Supplier:

Sample Location:

Sample By:

Test Technician:

	Test	Spec
Air Void (%):	<input type="text"/>	1.0 - 100.0
Stability (N):	<input type="text"/>	> 1
Flow (0.2mm):	<input type="text"/>	> 1.0
BRD :	<input type="text"/>	2,000
MRD :	<input type="text"/>	2,000
VMA (%):	<input type="text"/>	> 1.0

Sieve	Passing (%)	Specification:JMF (%)	Specification:Tolerance (%)
26.5 mm	<input type="text"/>	1.0	± 2.0B ± 3.0B
19.0 mm	<input type="text"/>	0.6	± 1.6B ± 2.6B
16.0 mm	<input type="text"/>		
13.2 mm	<input type="text"/>		
9.5 mm	<input type="text"/>		
4.75 mm	<input type="text"/>		
2.36 mm	<input type="text"/>		
1.18 mm	<input type="text"/>		
600 µm	<input type="text"/>		
300 µm	<input type="text"/>		
150 µm	<input type="text"/>		
75 µm	<input type="text"/>		
AC Content (%)	<input type="text"/>	1.00	±2.0B ±3.0B

Notes:

* Required Fields

Select and fill in pertinent information, and click Save. Please note: you cannot delete a certified sample.

Enter Marshall Asphalt Compaction Test

(Enter New Test > Marshall Asphalt > Compaction)

Marshall Asphalt Compaction Test CMATS Project #: 100
Project / Contract #: Cato.01.Project.2011.08.10.02
Project Name: Cato.01.Project.2011.08.10.02

Test #:

Test Type:

Mix Code/Name:

Date Received*:

Date Tested*:

Station:

Offset:

Thickness (mm):

BRD:

MRD:

Testing Lab*:

Contractor*:

Supplier:

Sample Location:

Sample By:

Test Technician:

Compaction (%):

Adjusted Compaction (%):

* Required Fields

To add a Marshall Asphalt Compaction test result, from the drop down menu select Enter New Test > Marshall Asphalt > Compaction to launch the Marshall Asphalt Compaction Test screen. Select and fill in pertinent data, and click Save. (Please note: you cannot delete a certified sample.) Once you click Save, you can review, edit, delete, or certify your mix design if needed. When done, click Back to add another concrete mix design.

If you wish to review your mix designs, go to the mix design screen, select your mix design, and hit Go.

Superpave Asphalt

There are two test types for superpave asphalt: Mix Properties and Compaction. Before you can enter, or view test result, you must enter a mix design first.

Adding a Superpave Asphalt Mix Design

(Project > Materials> Superpave Asphalt)

To add a Superpave Asphalt Mix Design from the drop down menu select Project > Materials> Superpave Asphalt to launch the Superpave Asphalt Mix Design screen. To add a mix design, click Add New to launch the Superpave Asphalt Mix Design screen. On this screen you will add Mix Design Code/Name, select Supplier, Mix Category, Traffic Category, add Application, fill in other pertinent data, and click Save. If there is a mistake, you can click Cancel. Once you click Save, you will be able to edit and add extra Sieve information.

If you wish to review your mix designs, go to the mix design screen, select your mix design, and hit Go.

Enter Superpave Asphalt Mix Properties Test

(Enter New Test > Superpave Asphalt > Mix Properties)

Superpave Asphalt Properties Test

CMATS Project #: 100
 Project / Contract #: Cato.01.Project.2011.08.10.02
 Project Name: Cato.01.Project.2011.08.10.02

Test #:

Test Type:

Mix Code/Name:

Location:

Date Received*:

Date Tested*:

Testing Lab*:

Contractor*:

Supplier: ASI Technologies Inc.

Sample Location: Lat: Long:

Sample By:

Test Technician:

Superpave Gyrotory Data @ Ndesign (75Gyrations)

	Sample	Spec
Air Voids (%)	<input type="text"/>	0.0 - 2.0
BRD :	<input type="text"/>	1.000
MRD :	<input type="text"/>	1.000
VMA (%)	<input type="text"/>	1.0 - 11.0
GMM Initial (%)	<input type="text"/>	< 11.0
GMM Design (%)	<input type="text"/>	1.0 - 11.0
VFA (%)	<input type="text"/>	1.0 - 11.0
DP (%)	<input type="text"/>	1.0 - 11.0

Superpave Gyrotory Data @ Nmax (115Gyrations)

	Sample	Spec
Air Voids (%)	<input type="text"/>	> 1.0
BRD :	<input type="text"/>	1.000
MRD :	<input type="text"/>	1.000
VMA (%)	<input type="text"/>	1.0 - 11.0
GMM Max (%)	<input type="text"/>	< 1.0
GSB :	<input type="text"/>	

Sieve	Passing (%)	Specification:JMF (%)	Specification:Tolerance (%)
25.0 mm	<input type="text"/>		
19.0 mm	<input type="text"/>		
12.5 mm	<input type="text"/>		
9.5 mm	<input type="text"/>		
4.75 mm	<input type="text"/>		
2.36 mm	<input type="text"/>		
1.18 mm	<input type="text"/>		
600 µm	<input type="text"/>		
300 µm	<input type="text"/>		
150 µm	<input type="text"/>		
75 µm	<input type="text"/>		
AC Content (%)	<input type="text"/>	5.00	±50.00B ±55.00R

Notes:

* Required Fields

To add a Superpave Asphalt Mix Properties test result, from the drop down menu select Enter New Test > Superpave Asphalt > Mix Properties to launch the Create screen. Select and fill in pertinent data, and click Save. (Please note: you cannot delete a certified sample.)

Enter Superpave Asphalt Compaction Test

(Enter New Test > Superpave Asphalt > Compaction)

To add a Superpave Asphalt Compaction test result⁵, from the drop down menu select Enter New Test > Superpave Asphalt > Compaction to launch the Superpave Asphalt Compaction screen. Select and fill in pertinent data, and click Save. (Please note: you cannot delete a certified sample.)

Superpave Asphalt Compaction TestCMATS Project #: 100
Project / Contract #: Cato.01.Project.2011.08.10.02
Project Name: Cato.01.Project.2011.08.10.02

Test #:	<input type="text"/>	Testing Lab*:	<input type="text" value="ASI Technologies Inc."/>
Test Type:	<input type="text" value="Quality Assurance"/>	Contractor*:	<input type="text" value="Select ..."/>
Mix Code/Name:	<input type="text" value="Cato.01.ASMD.2011.08.10.01"/>	Supplier:	<input type="text" value="ASI Technologies Inc."/>
Date Received*:	<input type="text" value="28 Aug 2013"/>	Sample By:	<input type="text"/>
Date Tested*:	<input type="text" value="28 Aug 2013"/>	Test Technician:	<input type="text"/>
Station:	<input type="text"/>	Sample Location:	Lat: <input type="text"/> Long: <input type="text"/>
Offset:	<input type="text"/>	Compaction (%):	<input type="text"/>
Thickness (mm):	<input type="text"/>	Adjusted Compaction (%):	<input type="text"/>
BRD :	<input type="text"/>		
MRD :	<input type="text"/>		

* Required Fields

Once you click Save, you can review, edit, delete, or certify your mix design if needed. When done, click Back to add another concrete mix design.

If you wish to review your mix designs, go to the mix design screen, select your mix design, and hit Go.

Aggregate Specification

There is one test for Aggregates: Aggregate Properties. Before you can enter, or view test result, you must enter an Aggregate Specification first.

Adding an Aggregate Specification

(Project > Materials>Aggregate)

To add an aggregate specification, from the drop down menu select Project Setup > Materials> Aggregate to launch the Aggregate Specification screen. To add a specification, click Add New to launch the Aggregate Specification screen.

On this screen you will add Specification Code/Name, select Supplier, add Application Name and fill in other pertinent data. Shown below contains a 'Sieve Set' field for the appropriate specification. If there is a mistake, you can click Cancel. Once you click Save, you will be able to add required Sieve information, and click Save.

Select Project	New Project	Project ▾	View Tests ▾	Enter New Test ▾	Import and Export ▾	Profile ▾	Help ▾
----------------	-------------	-----------	--------------	------------------	---------------------	-----------	--------

Aggregate Specification

CMATS Project #: 100
 Project / Contract #: Cato.01.Project.2011.08.10.02
 Project Name: Cato.01.Project.2011.08.10.02

Aggregate Type*:	<input type="text" value="A"/>
Supplier:	<input type="text" value="ASI Technologies Inc."/> <input type="button" value="Add New Supplier"/>
Application:	<input type="text" value="Base Layer"/>
Crushed Particle Min (%):	<input type="text" value="2.6"/>
Asphalt Coated Particle Max (%):	<input type="text" value="2.75"/>
Sieve Set:	<input type="text" value="Aggregate"/>

* Required Fields

If you wish to review your specifications, go to and select your specification screen then hit GO.

Enter Aggregate Properties Test

(Enter New Test > Aggregates > Aggregate Properties)

To add an Aggregate Properties test result from the drop down menu select Enter New Test > Aggregates > Aggregate Properties to launch the Aggregates Test screen. Select your specification from the drop down menu, add Test Number, select Test Type, Testing Laboratory, Contractor, add Sample Weight, Seal Number, fill in other pertinent data, and click Save. (Please note: you cannot delete a certified sample.) Once you click Save, you can review, edit, delete, or certify your test if needed. When done, click Back to add another test.

Certifying Test Results

Every test result must be certified. Once certified, depending upon your Profile Role, the test cannot be edited. To certify a test result, select the test result and click Certify.

Reviewing Test Results

Test data can be viewed and downloaded in various formats. Depending on your security level, you will not be able to see data, for example, someone with the security clearance of Data Viewer cannot see data till it is certified)

View Test Data

(View Tests > [MATERIAL > [TEST]])

To view any test result, from the drop down menu select View Tests > [MATERIAL] > [TEST] , for example, to view an AVS test result, from the drop down menu select View Tests > Concrete > AVS and the Test Concrete Air Void screen populates test results. You have the option to filter test by Mix Design, New Tests, and Updated Tests. Once you selected which filter to use, select an option to review. When you are reviewing a test³, you can Edit, Add New, Delete, or Certify a test if you have the appropriate permissions.

CMATS™ Sean Kean [Log Off]

Select Project New Project Project View Tests Enter New Test Import and Export Profile Help

Aggregate Specification CMATS Project #: 258
Project / Contract #: 2013-0001
Project Name: Data Import Testing

Current Aggregate Type and Supplier: R-4 (FFF Aggregates) (0 Test) Go

CMATS Aggregate ID: 144
Aggregate Type: R-4
Supplier: FFF Aggregates
Application: CMATS Testing
Crushed Particle Min (%): 60.0
Asphalt Coated Particle Max (%): 30.0
Sieve Set: Aggregate

Sieve Specification

Sieve	Sieve Limits (%)		
150 mm	100	-	100
106 mm	100	-	100
75 mm	100	-	100
53 mm	100	-	100
37.5 mm	100	-	100
26.5 mm	100	-	100
19.0 mm	85	-	100
16.0 mm	75	-	98
13.2 mm	65	-	90
9.5 mm	50	-	73
6.7 mm	45	-	63
4.75 mm	35	-	55
2.36 mm	22	-	47
1.18 mm	15	-	40
600 µm	9	-	32
300 µm	5	-	22
150 µm	3	-	12
75 µm	2	-	8

View Test Results:

Aggregate Properties

Edit Delete Back

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³ Your security level will determine if you can review, edit, or certify a test result.

Import and Export

The import, export process allows you to import project data as needed.

Import

(Import and Export > Import)

To import data, click browse, select the Excel file, and click Import. If there is more than one file, select Upload More Files to add extra files.

Import Data	CMATS Project #: 57 Project / Contract #: Cato.01 Project Name: Cato.01
Download Excel Template Files	
<input type="text"/> <input type="button" value="Browse..."/>	
Upload More Files	<input type="button" value="Import"/>

Export

(Import and Export > Export)

To export data, select the Test Type, select the Material, Mix Design, Tests to Export, and select format (the default format is PDF). There are XML options for different version of Microsoft® Office, CSV, or PDF.

Export Data	CMATS Project #: 130 Project / Contract #: Lab Organization Project Name: Lab Organization
Test Type: <input type="text" value="--- All ---"/>	
Material: <input type="text" value="Concrete"/>	
Tests to Export*: <input type="checkbox"/> Concrete Compressive Strength <input type="checkbox"/> Concrete RCP <input type="checkbox"/> Concrete AVS <input type="checkbox"/> Concrete Shrinkage Check All Uncheck All	
Export Format: <input checked="" type="radio"/> XML (Excel 2007) <input type="radio"/> XML (Excel 2010) <input type="radio"/> XML (Excel 2003) <input type="radio"/> XML (Excel 2002) <input type="radio"/> CSV <input type="radio"/> PDF	
<input type="button" value="Export"/>	
* Required Fields	

Your Profile and Help

Each individual will have a profile in CMATS™ which is linked to CMATS™ Projects and Notifications, and on occasion may need to be updated. Your security level will control which information you may access. Your profile can be viewed and edited however you cannot delete it.

Profile

You profile controls various elements in CMATS™ such as your password, notifications, projects.

Change Password

(Profile > Change Password)

During registration you create your own password, and may change it. For users who are created by Profile Administrators, a password is auto-assigned, and you may wish to change it.

Organization

(Profile > Organization)

Only the Profile Administrator can access the organization section which is where you control your company logo, address(es), and company contact(s). If you are involved in more than one organization, you can select another organization from the drop down menu.

Upload Report Header

The Report header is your custom header that appears at the top of every page of every report in CMATS where the selected organization is the Testing Laboratory. To upload the header, click Upload Report Header, and select an image which:

- the aspect ratio is 7.5x1.0 (the image will be cropped to meet this ratio)
- minimum image size should be 720x96
- recommended image size is 1500x200
- valid formats are PNG, BMP, GIF, JPEG (JPG), EXIF, and TIFF.



The screenshot shows a user interface for organization management. It includes a dropdown menu for 'Organization' currently set to 'ASI Technologies Inc.', two buttons labeled 'View Contacts' and 'View Address', and a button labeled 'Upload Report Header'. At the bottom right, there is a 'Sort By' dropdown menu set to 'Address Order'.

Show Contacts/Addresses

By default, you are shown address information for your organization, but you can switch to the contacts view by clicking Show Contacts, and vice versa.

If you have a branch office address, and any other organization involved in your project, click Add New, and fill in the needed information. Repeat for each new address that needs to be added. If you need to edit an address, please click Edit and modify information as needed. If you need to delete an address, please click Delete beside that address.

To add a new contact click Show Contacts then click add new to start adding the contact information. By default, the contact's organization will always be your Organization name, but will select the contact's organization address if different from your address. If the contact's address is not listed, select New Address from the drop down menu and start entering the data as needed. When the contact has been added, you edit the contact address details by clicking Details beside the contact. Please note, there are two edit buttons on this screen. One is beside the organization name to edit organization data for this contact, and one is for the contacts data, such as name, email, etc.

Personal

(Profile > Personal)

If you need to edit something about your profile, navigate to the Personal section of your profile. The personal data contained in this section includes your name, email, and other contact information. If you need to add a secondary address, from the Add Address drop down menu, select an address, add a job title, and click save. Your profile is accessible and editable regardless of security level. Please note: you cannot edit your address if it is shared with another contact, unless you are also the Profile Admin.

Project

(Profile > Projects)

Each project needs a key to unlock the full capabilities of CMATS™. Project keys are valid for one year, and may be purchased individually as part of the New Project or Project Renewal processes, or may be pre-purchased for use on future projects. The one-year period of validity of pre-purchased project keys begins when the key is applied to a project, not when the key is purchased.

Purchasing Project Keys

If setting up multiple projects, it may be desirable to purchase several keys in a single transaction. To purchase key(s), select Profile > Projects, and, if needed, select Organization in the drop down menu.

Organization: ▼

Projects :

CMATS Project #	Project / Contract #	Project Name	Created	Expires	Key / License
56	100	QA Project	25 Jul 2011 11:40	28 Mar 2023 09:10	View Renew
59	101	QA Project - Test 2	27 Jul 2011 11:28	30 Oct 2012 09:11	View Renew
60	QAP 001	QA Project - Test 3	29 Jul 2011 13:55	31 Aug 2013 09:02	View Renew
61	julia 111	111	29 Jul 2011 17:54	31 Aug 2012 10:50	View Renew
62	200	QA Project - Test 4	02 Aug 2011 08:49	30 Nov 2013 13:13	View Renew
63	123	test	02 Aug 2011 11:30	02 Aug 2013 09:03	View Renew
64	222	222	03 Aug 2011 13:39	02 Sep 2012 09:06	View Renew

Displaying items 1 - 10 of 46

Click Buy Keys in the bottom left corner, and the Buy Keys window will open.

- Enter quantity for a CMATS™ Project Key, and 10 Pack of CMATS™ Project Keys
- Click Continue
- Select Address
- Click Continue
- Confirm information
- Click Continue
- Submit Credit Card information
- Click Submit
- Confirm and save receipt
- Click Continue

You will be returned to the Organization Projects and Organization Keys screen. Your key(s) will be listed in the Unused Project Keys window.

Unused Project Keys :

Purchase Date	Purchased By	Key ID
10 Aug 2012 08:34	Rubini Suthakaran	7fbdeb1b-2984-42b2-9ba4-69a2bfb8bbd9
10 Aug 2012 08:34	Rubini Suthakaran	98713dc7-9ccb-48d7-8095-b7893d0af6dd
10 Aug 2012 08:34	Rubini Suthakaran	e00b8712-32c3-4ad8-b3e3-cb9c33ba8b63
24 Aug 2012 13:05	Sean Kean	7c72cc7f-51a5-4b13-8bff-0092c110bae0

Displaying items 261 - 264 of 264

To apply the key to a project, click Renew listed by the project, and click Use Existing Key.

Renewing Projects

To renew a project, you will need to buy a new key or apply an Unused Project Key. If you do not have a Project Key, please refer to Purchasing Project Keys, above. To renew a project:

- Click Renew by the Project

Organization: ASI Technologies Inc. ▾

Projects :

CMATS Project #	Project / Contract #	Project Name	Created	Expires	Key / License
56	100	QA Project	25 Jul 2011 11:40	28 Mar 2023 09:10	View Renew
59	101	QA Project - Test 2	27 Jul 2011 11:28	30 Oct 2012 09:11	View Renew
60	QAP 001	QA Project - Test 3	29 Jul 2011 13:55	31 Aug 2013 09:02	View Renew
61	julia 111	111	29 Jul 2011 17:54	31 Aug 2012 10:50	View Renew
62	200	QA Project - Test 4	02 Aug 2011 08:49	30 Nov 2013 13:13	View Renew
63	123	test	02 Aug 2011 11:30	02 Aug 2013 09:03	View Renew
64	222	222	03 Aug 2011 13:39	02 Sep 2012 09:06	View Renew

Displaying items 1 - 10 of 46

- Apply new key
 - Use Existing Key: applies Unused Project Key
 - Buy New Key: please refer to Purchasing Project Keys, above

Once the new key is applied, the project will unlock.

[file](#) > [Projects](#) and edit as needed.

Help

There are two help sections for individuals: Documentation; Contact Support.

Documentation

(Help > Documentation)

This is a direct link to the [CMATS™ website](#) which lists various documents to aid you in CMATS™, submission forms, checklists, and other forms. Besides download PDF's, there is also a helpful FAQ, and Forums.

Contact Support

(Help > Contact Support)

This is a direct link to the [CMATS™ Contact Us](#) form. This form will send a direct message to our support team.

Glossary

Terms

A

Architect	This individual or company is a Data Viewer who designed the construction project.
-----------	--

B

C

Certified Test Data	This is data that is confirmed by the Supervising Engineer, and can be viewed by Data Viewers.
---------------------	--

Certify Test Data	The action that certifies data producing the Certified Test Data (See Certified Test Data).
-------------------	---

Construction Team	These are individuals and companies involved in each CMATS Project.
-------------------	---

Contact	An individual user. Every contact belongs to an Organization.
---------	---

CSV	A data/file format commonly used by spreadsheet applications like Windows Excel™.
-----	---

D

Data Certifier	The individual in CMATS™ who can check and certify data. This person may also perform all of duties associated with the Data Clerk
----------------	--

Data Clerk	The individual who is responsible for entering test data, and can edit data that has not been certified.
------------	--

Data Viewer	This is a group of people and companies who can view certified test results.
-------------	--

Delete	The act of removing data from the CMATS™ system.
--------	--

Delete Project	The act of removing the project from the CMATS™ system.
----------------	---

Distribution List	A list of persons and companies on individual test reports, under the heading 'Distribution List'. Inclusion on the Distribution List is not related to Notification settings
-------------------	---

Download Data	This allows individuals and companies the option to download test results to their PC. There are two file formats: CSV; PDF.
---------------	--

E

Engineer	This individual or company is a Data Viewer who is the project Engineer.
----------	--

Enter New Data	The act of adding test data in to the CMATS™ system.
----------------	--

F

G

General Contractor	This individual or company is a Data Viewer who is the primary contractor for the project.
--------------------	--

Graph Test Results	This displays a line chart with test results.
--------------------	---

H

I

J

K

L

M

Manage Roles	The ability to assign Team Roles, Project Specific Roles, set permissions, and notification levels.
--------------	---

Material Supplier	This is an individual or company is a Data Viewer who is supplying materials for a project.
-------------------	---

Mix Design	The material specification for a specific engineered material, and is grouped by Material Type.
------------	---

N

Notify	This is to inform someone of updates or new data entered for their project in the CMATS™ system.
--------	--

O

Organization	A company, association, government agency etc. that operates as a corporate body.
--------------	---

Owner	This person or company which owns the facility or installation which is under construction.
-------	---

P

Password	A combination of characters associated with your UserID for your login.
PDF	A file format that provides an electronic image of text or text and graphics that looks like a printed document and can be viewed, printed, and electronically transmitted
Permission	The amount of access an individual or company has been granted in the CMATS™ system.
Print Test Results	This allows individuals and companies the option to print test results.
Profile Administrator	The individual in CMATS™ who creates and edits the projects and users within their Organization
Project Administrator	Responsible for managing participants and entering mix designs in a CMATS™ project.
Project Architect	Please see Architect
Project Contractor	Please see General Contractor
Project Engineer	Please see Engineer
Project Material Supplier(s)	Please see Material Supplier

Q

R

S

T

U

User	An assigned, individual login ID for CMATS™. All users are Contacts.
------	--

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