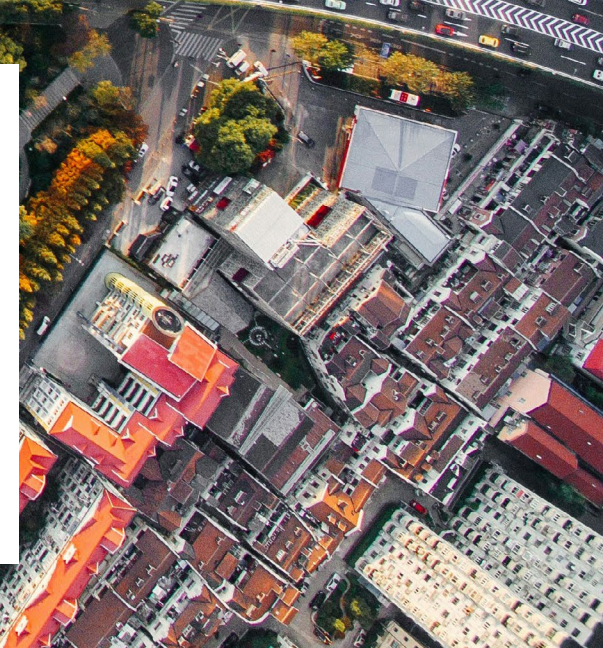


Getting CarbonCure Approved for Use on DOT Projects

Engaging with your local Department of Transportation (DOT) to get CarbonCure approved for use on infrastructure projects is a strategic process that involves research, planning, and relationship-building. This guide will walk you through the essential steps to navigate this process successfully.



Step 1: Research

1.1 Understand the State DOT's Approved Product List or Qualified Product List

Begin by searching for your state DOT's Approved Product List (APL) or Qualified Product List (QPL). These lists are publicly available and provide insight into what products are already approved for use.

Identify Relevant Categories

Look for categories under which CarbonCure might fit. Most of the time, CarbonCure falls under ASTM C494 Type S for performance concrete admixtures. However, this may vary by state.

1.2 Review the DOT's Specification Book

Review the state DOT's specification book to see where ASTM C494 Type S is mentioned. If the specifications don't explicitly mention ASTM C494 Type S, dig deeper to determine if there are alternative categories or opportunities for case-by-case approval.



Example

In Texas, ASTM C494 Type S was not a recognized category, but by reviewing the spec book, it was determined that the regional engineer could approve mixes with CO₂ on a case-by-case basis. Now, Texas DOT has approved such mixes and continues this approach.

1.3 Understand Acceptance Criteria

In some cases, we may need to advocate for the creation of a new category for carbon mineralization or sequestration if existing categories do not align with CarbonCure's benefits. Be prepared to face resistance, especially if the DOT is traditionally averse to making changes.



Example

Florida has a Type S category, but it is further split into subcategories like viscosity and rheology, without a clear reference to strength enhancement. In such cases, discussions with the DOT may be necessary to create a new category specifically for carbon mineralization or sequestration.



Step 2: Create a Plan

2.1 Determine the Application Process

Each DOT will have its own process for approving new products. Some require only a simple email; others have a form on their website (e.g., North Carolina and Kentucky). However, others might have more complex processes or detailed manual submissions.

At a minimum, be prepared to provide test data, a technical data sheet, and a cover letter. The specifics will often refer back to the DOT's specification book.

2.2 Types of Testing Typically Requested

DOT In-Lab Testing

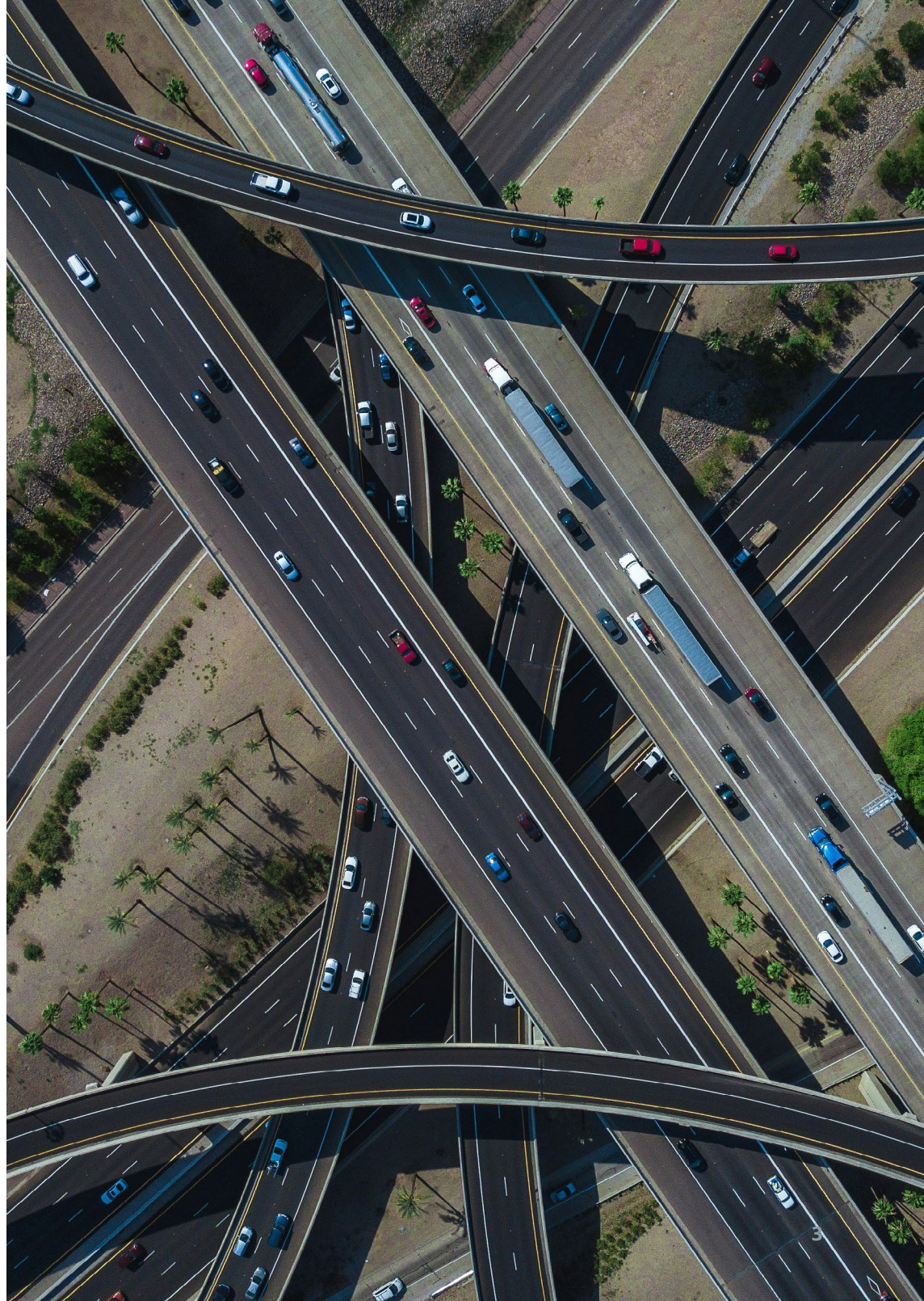
Some states, like Texas and Pennsylvania, may want to conduct their own in-lab testing. Partnering with a local testing provider to test samples can help prove the technology's effectiveness.

Third-Party Studies

States may require further studies by third-party academic institutions. These studies are typically viewed as unbiased and strictly for research and development.

Beyond Standard Testing

Some states might ask for testing beyond AASHTO (American Association of State Highway and Transportation Officials) and ASTM C494 standards. Ensure you have data that includes cement type, cement load, and CO₂ dosage. In certain cases, states may accept field data from existing customers to support your case (e.g., Ozinga in Florida).



Step 3: Leverage Your Relationships

3.1 Engage with Local Producers

DOTs are often more inclined to approve products that local producers already use. Identify key local producers that have adopted CarbonCure and use their examples to bolster your case. Larger producers, in particular, can influence a DOT's decision. If you can demonstrate that major producers are consistently using CarbonCure on infrastructure projects in the state, it increases the likelihood of formal approval.

3.2 Build Relationships with Regional Engineers

The regional engineer is often the final sign-off authority for specific projects. Establishing and ensuring a positive relationship with these engineers can lead to more favorable outcomes, especially if they have prior positive experiences with CarbonCure.

A well-respected regional engineer who has had success with CarbonCure can contribute to broader discussions within the DOT, potentially leading to more widespread approval.

By understanding the DOT's processes, meeting their specific requirements, and leveraging local support, you can increase the chances of approval and pave the way for increased government procurement of your sustainable concrete products for infrastructure projects.

For more information or support when engaging with your Department of Transportation, connect with your dedicated CarbonCure Representative.





Build for the Future. Build with CarbonCure.

CarbonCure has been used on thousands of projects ranging from healthcare to higher education, residential developments, and corporate campuses.

For more information about building with CarbonCure concrete, visit carboncure.com. To get in touch with a CarbonCure representative, send us an email at info@carboncure.com or give us a call at **+1 (902) 448-4100** (Worldwide) or **+1 (844) 407-0032** (North America).

3rd Party Testing Results

Year	Report Scope	Prepared By	Report	Lab Concrete or Field Concrete
2020	General concrete properties assessment of CarbonCure mixes	Nanyang Technological University (Singapore)	Assessment of Performance and Durability of Pan-United's CarbonCure Concrete	Field
2022	How much CO ₂ is sequestered, and what are the effects on the performance of the pavement?	National Concrete Pavement Technology Center (Iowa State University)	Use of Carbon Dioxide for Sustainable and Resilient Concrete	Field
2024	General concrete properties assessment of CarbonCure mixes	Holcim Innovation Center (France)	Holcim Research & Development	Lab
2024	General concrete properties assessment of CarbonCure mixes	Cemex Research (Mexico)	Cemex Research & Development	Lab
2020	Direct comparison of a conventional slab on grade IMI mix to a CarbonCure adjusted mix	CRT Concrete Consulting LLC	CRT CarbonCure Testing Report	Field