

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER N-20-327A

Relating to CARB Approval to use No-added Formaldehyde Resins by  
Composite Wood Product Manufacturers under  
section 93120.3, title 17, California Code of Regulations

**Jeld-Wen, Inc. West Virginia**

Whereas, the California Air Resources Board (CARB) has adopted the "Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products" (ATCM, title 17, California Code of Regulations, sections 93120-93120.12), which establishes formaldehyde emission standards for composite wood products;

Whereas, section 93120.1(a)(29) of the ATCM defines "no-added formaldehyde" (NAF) based resins to mean resins formulated with NAF as part of the resin cross-linking structure for making hardwood plywood (HWPW), particleboard (PB), medium density fiberboard (MDF), or thin medium density fiberboard (tMDF) including, but not limited to resins made from soy, polyvinyl acetate, or methylene diisocyanate;

Whereas, section 93120.3(c) of the ATCM allows manufacturers of HWPW, PB, MDF, and tMDF who use NAF-based resins to apply for written approval from the Executive Officer for an exemption from the requirements of section 93120.3(b) of the ATCM;

Whereas, section 93120.3(c) of the ATCM allows manufacturers of HWPW, PB, MDF, and tMDF who use NAF-based resins to submit an application for an exemption from the requirements of section 93120.3(b) of the ATCM to the Executive Officer, which includes: (A) a statement indicating which product types will be manufactured using NAF-based resins for sale in California; (B) the chemical formulation of the candidate NAF-based resins, including base resins, catalysts, and other additives used in manufacturing; (C) the name of their CARB-approved third-party certifier (TPC); and (D) data on emissions performance of the candidate NAF-based resins;

Whereas, the data on emissions performance of the candidate NAF-based resin required in section 93120.3(c) of the ATCM must be obtained by working with a CARB-approved TPC, and must include three months of routine quality control testing data, the correlation of the routine quality control testing data to primary or secondary testing data, and the results of one primary or secondary method test, as required in Appendix 2 of section 93120.12 of the ATCM;

Whereas, section 93120.3(c)(1) of the ATCM requires that 90 percent of the three months of routine quality control testing data and the result of one primary or secondary method test must be shown to be no higher than 0.04 parts per million (ppm), and that all data must be shown to be no higher than 0.05 ppm for HWPW and 0.06 ppm for PB, MDF, and tMDF;

Whereas, section 93120.3(c)(4) of the ATCM provides that the Executive Officer shall approve the application and issue an Executive Order if the evidence submitted by the applicant is sufficient to demonstrate that the applicant has met the requirements specified in section 93120.3(c)(1) of the ATCM;

Whereas, Jeld-Wen Wood Fiber Division (Jeld-Wen or the applicant) submitted an original application that we received on September 5, 2008;

Whereas, the application from Jeld-Wen specified the range in product manufacturing parameters, applicable post-press product treatments, base resin trade name(s) and base resin manufacturer(s)/supplier(s), and other ingredients added to the base resin by the applicant to manufacture NAF tMDF products;

Whereas, CARB was provided base resin/adhesive information specifying the base resin polymer type and minimum and maximum values of all major and any minor ingredients in the base resin on a percent weight of solids basis;

Whereas, the base resins/adhesive supplier, commercial name, and resin type are set forth in Confidential Attachment A;

Whereas, section 93120.3(c) of the ATCM allows NAF product manufacturers to apply for re-approval by CARB by submitting an updated application;

Whereas, Jeld-Wen submitted the original and the updated applications for approval to CARB as follows:

Executive Order #	Received Date	Signed Date	Action
N-08-003	09/05/2008	12/26/2008	Original
N-08-003A	02/19/2009	03/19/2009	Amendment to add an additional resin system
N-08-003B	08/09/2010	09/15/2010	Amendment to modify the operating parameters
N-10-003	11/17/2010	12/23/2010	Renewal and amendment to include an additional facility
N-13-003	11/13/2012	02/26/2013	Renewal
N-13-003A	02/11/2014	03/06/2014	Amendment to modify the list of approved facilities, which includes all three facilities located in West Virginia, Oregon, and Louisiana
N-15-003	02/17/2015	03/02/2015	Renewal

Executive Order #	Received Date	Signed Date	Action
N-17-003	02/17/2017	03/21/2017	Renewal
N-18-327	10/04/2018	11/16/2018	Renewal and amendment to issue a separate Executive Order (N-18-327) for Jeld-Wen, Inc. West Virginia (Jeld-Wen or the applicant)
N-20-327	11/04/2020	12/21/2020	Renewal

Whereas, Jeld-Wen submitted a request for approval to add a new resin system to the current Executive Order N-20-327 on December 1, 2021;

Whereas, the request for approval to add a new resin system from Jeld-Wen was deemed complete on December 24, 2021;

Whereas, the Executive Officer finds that the evidence submitted by the applicant meets the criteria specified in section 93120.3(c)(4) of the ATCM; and

Whereas, the Executive Officer approved Jeld-Wen's request for adding a new resin system and it is appropriate that Executive Order N-20-327 be superseded by this Executive Order N-20-327A.

Now, therefore, it is ordered that Jeld-Wen is hereby approved as a NAF manufacturer of tMDF exempt from the requirements of section 93120.3(b) and Appendix 2 of section 93120.12 of the ATCM, provided that the following terms and conditions are met for products sold, supplied, offered for sale, or manufactured for sale in California:

1. Jeld-Wen must use the commercial resin listed and supplier listed in Section A of Confidential Attachment A of this Executive Order for the manufacture of NAF tMDF products.
2. As specified in Section B of Confidential Attachment A, Jeld-Wen is legally responsible for ensuring that the base resin specifications are within the ranges specified in the original application and any subsequent amendments of this Executive Order.
3. The application rate of the base resins used for the manufacture of NAF composite wood products by Jeld-Wen must be within the ranges specified in Section C of Confidential Attachment A of this Executive Order.
4. Other chemical components of the base resins (such as sizing wax and release wax) used for the manufacture of NAF composite wood products by Jeld-Wen must be within the ranges specified in Section D of Confidential Attachment A of this Executive Order.

5. The allowable operating parameters for press temperature and press time for the base resins used to manufacture the NAF composite wood products by Jeld-Wen must be within the ranges specified in Section E of Confidential Attachment A of this Executive Order.
6. Only the composite wood products with the product names listed in Section F of Confidential Attachment A of this Executive Order are authorized under this Executive Order.

Be it further ordered that this Executive Order N-20-327A supersedes Executive Order N-20-327, which was issued on December 21, 2020.

Be it further ordered that Jeld-Wen may change the resin system supplier listed in Section A of Confidential Attachment A of this Executive Order if the new resin supplier supplies the same resin constituent listed in Confidential Attachment A of this Executive Order, at least one primary or secondary method test is performed on random samples selected by their CARB-approved TPC, and the Chief of the Risk Reduction Branch within the Transportation and Toxics Division is notified before Jeld-Wen uses the resin for production.

Be it further ordered that Jeld-Wen must conduct confirmatory testing for any new resin supplier by demonstrating that the results of one primary or secondary method test for the new resin system supplier are no higher than 0.04 ppm for the NAF products authorized under this Executive Order.

Be it further ordered that the Executive Officer may review and, for good cause, modify or revoke this Executive Order as provided in section 93120.3(c)(4) of the ATCM. The Executive Officer shall not modify or revoke this Executive Order without affording the applicant the opportunity for a hearing in accordance with the procedures specified in title 17, California Code of Regulations, section 60055.1 et seq.

Be it further ordered that this Executive Order shall have a duration of two years from the date of issuance of Executive Order N-20-327 (i.e., December 21, 2020): the applicant may apply for re-approval as provided in section 93120.3(c)(4) of the ATCM.

Be it further ordered that the applicant must maintain records in electronic or hard copy form for two years, for review by CARB upon request, as specified in section 93120.3(g) of the ATCM.

Be it further ordered that the applicant must notify the Executive Officer in writing within 30 days of any change in their product manufacturing parameters or base resin manufacturer(s) or supplier(s) that constitute a modification outside the scope of their application for reduced testing under or an exemption from the requirements in section 93120.3(b) of the ATCM.

Executed at Sacramento, California on this 16<sup>th</sup> day of February 2022.



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Robert Krieger, Chief  
Risk Reduction Branch  
Transportation and Toxics Division