



MALLINDA

VITRIPLY™

COMPOSITE LAMINATE

SCALABLE WELDING SOP



MALLINDA'S VITRIPLY COMPOSITE LAMINATE IS A WELDABLE FULLY-CURED COMPOSITE LAMINATE DEVELOPED BY MALLINDA TO SOLVE THE RAPID COMPOSITE MANUFACTURING LIMITATIONS CURRENTLY AFFECTING THE AEROSPACE, DEFENSE, AND CONSUMER MARKETS



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MATERIALS:

(PROVIDED):

(3) VITRIPLY™ COMPOSITE LAMINATE
PRE-CURED PREPREG PLIES

(1) CONTACT CARD

(1) VITRIMAX STICKER

(REQUIRED, NOT PROVIDED)

(1) HIGH-TEMP RELEASE LINER

HYDRAULIC PRESS WITH HEATED PLATENS

PERSONAL PROTECTION EQUIPMENT



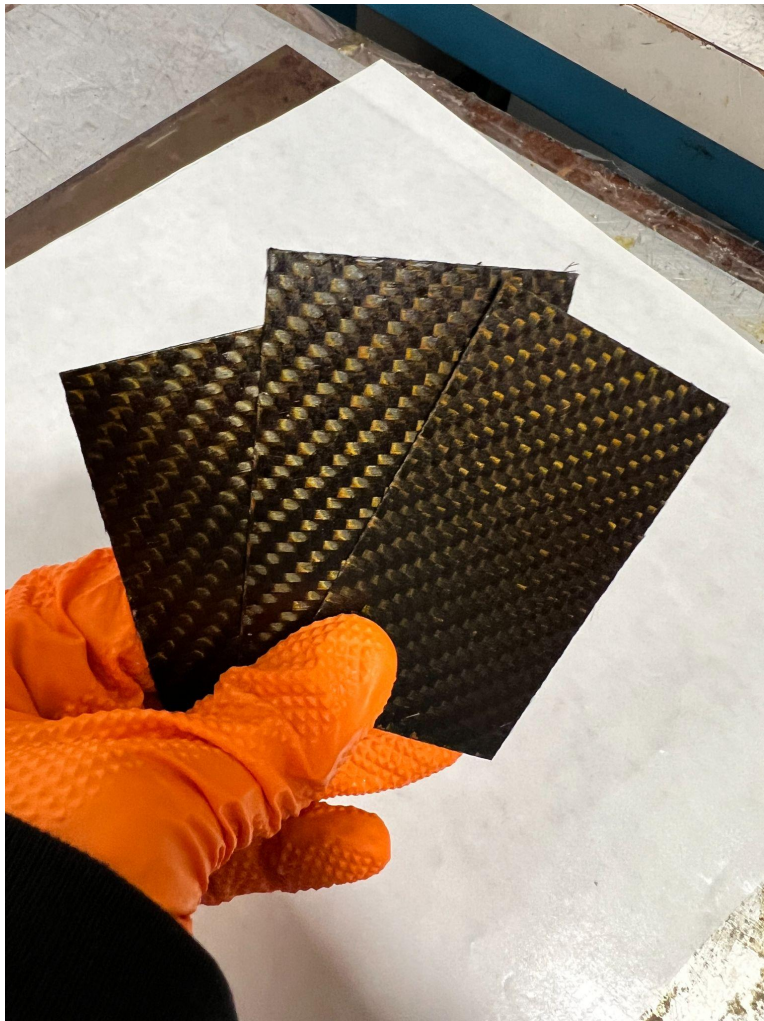
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PRE-HEAT HYDRAULIC PRESS PLATENS
(OR COMPRESSION MOLDING DIE) TO
160°C (320°F)



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USE APPROPRIATE PPE

- EYE PROTECTION
- NITRILE GLOVES (WHEN APPLICABLE)
- HEAT-RESISTANT GLOVES (WHEN APPLICABLE)

TAKE PROVIDED (3) VITRIPLY™
PRE-CURED COMPOSITE LAMINATE PLIES
AND PLACE IN DESIRED CONFIGURATION
BETWEEN TWO SHEETS OF HIGH-TEMP
RELEASE LINER (OR SIMILAR)



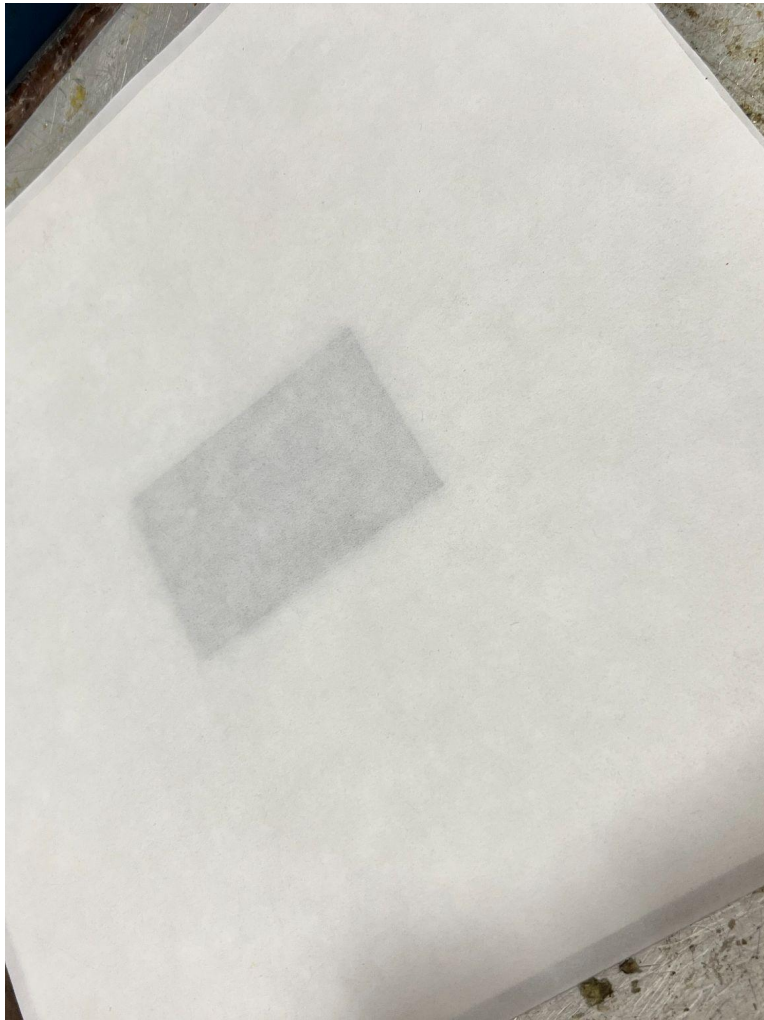
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TAKE PROVIDED (3) VITRIPLY™
PRE-CURED COMPOSITE LAMINATE PLYS
AND PLACE IN DESIRED CONFIGURATION
BETWEEN TWO SHEETS OF HIGH-TEMP
RELEASE LINER (OR SIMILAR)



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TAKE PROVIDED (3) VITRIPLY™
PRE-CURED COMPOSITE LAMINATE PLIES
AND PLACE IN DESIRED CONFIGURATION
BETWEEN TWO SHEETS OF HIGH-TEMP
RELEASE LINER (OR SIMILAR)



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PPE: HEAT-RESISTANT GLOVES

PLACE STACK, WHICH INCLUDES:

(1) SHEET HIGH-TEMP RELEASE LINER
(3) VITRIPLY™ COMPOSITE LAMINATE
PLIES

(1) SHEET HIGH-TEMP RELEASE LINER

BETWEEN TWO HEATED PLATENS (OR IN
COMPRESSION MOLDING DIE CAVITY) IN
HYDRAULIC PRESS



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ENSURE HEATED PLATENS OR COMPRESSION DIE ARE AT A STABLE, CONSTANT TEMPERATURE OF NO LESS THAN 160°C (320°F)

APPLY 200PSI TO THE LAMINATE STACK FOR 180 SECONDS OR UNTIL FULL LAMINATE STACK HAS BEEN EXPOSED TO 160°C (320°F) UNDER 200PSI LOADING



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PPE: HEAT-RESISTANT GLOVES

RELEASE PRESSURE FROM THE HYDRAULIC PRESS AND CAREFULLY REMOVE THE HOT PRESSED STACK FROM BETWEEN THE PLATENS (OR DIE)



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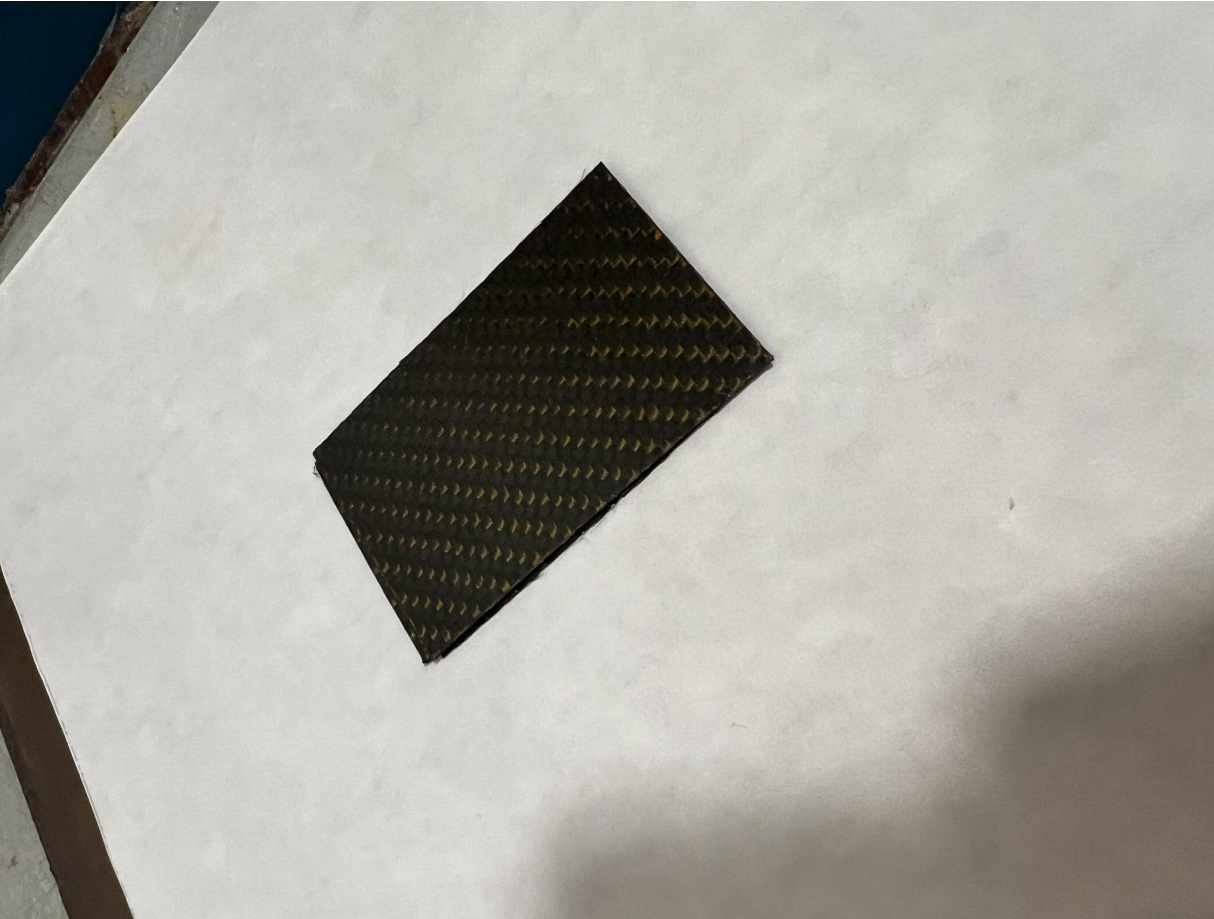


PPE: HEAT-RESISTANT GLOVES

PLACE THE HOT LAMINATE STACK ON A FLAT SURFACE. A FLAT TOP PLATE IS RECOMMENDED TO BE PLACED ON TOP OF THE STACK TO AID WITH COOLING



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REMOVE THE TOP SHEET
RELEASE LINER

YOUR SAMPLE COUPON
IS NOW WELDED. IF
BONDING WAS
UNSUCCESSFUL, SIMPLY
REPEAT THE PROCEDURE
WITH A LONGER DWELL
TIME AND/OR
ADDITIONAL PRESSURE



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AGILE. ADAPTIVE. SCALABLE.

VITRIPLY™

COMPOSITE MANUFACTURING SOLUTION

BY:



MALLINDA

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