

# BARCOL HARDNESS TEST REPORT

Test Standard:

ASTM D 2583: 1995 Standard Test Method for Indentation Hardness  
 of Rigid Plastics by Means of a Barcol Impressor

Sample Information:

Client Name:	Fiber Glass International
Mailing Address:	P.O. Box 26
Mailing Address:	Richlands
Mailing Address:	Qld 4077
Attn:	
Phone:	07 32713944
Fax:	07 32713603
STS Job Number:	STS-05-104-H
Client Job Id:	VMR Whitsunday Job # 284 Test Panel
Sample Description:	Laminate Test Panel
Specimen Orientation:	Mould Side Tested
Specimen Conditioning:	23°C, 50% RH Constant for 88 Hours
Number of Readings:	33
Test Date:	30/06/2005
Testing Technician:	

Test Equipment Details:

Impressor Model:	Barber-Colman GYZJ 934
Serial Number:	11069.3
Calibration Date:	8/06/2005
Location:	P6 Test Laboratory, Faculty of Engineering & Surveying, USQ

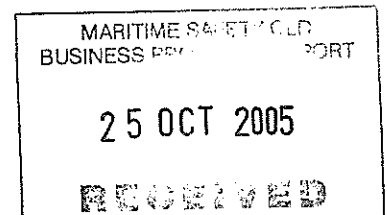
Specimen Results:

Barcol Hardness	
Average:	45
Standard Deviation:	4.6

Checked By: \_\_\_\_\_

Authorised Signature: \_\_\_\_\_

Date: 11-07-2005



## TENSILE TESTING REPORT

ISO 527-4/2/2: 1993 Plastics – Determination of Tensile Properties

Test Date:  
7/07/2005

Test Method:  
FCDD Laminate Tensile Test - Dual Ext - Normal Tension  
(ISO 527).msm

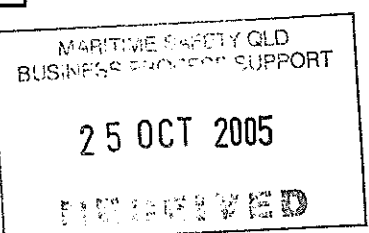
Operator:

### Sample Information:

(A) Client Name:	Fiber Glass International
(B) Mailing Address:	P.O. Box 26
(C) Mailing Address:	Richlands
(D) Mailing Address:	Qld 4077
(E) Attn:	
(F) Phone:	07 32713944
(G) Fax:	07 32713603
(H) Client Job ID:	VMR Whitsunday Job # 284 Test Panel
(I) STS Job Number:	STS-05-104-T
(J) Specimen Orientation:	0 Degrees
(K) Sample Description:	Laminate Test Panel
(L) Layup Sequence:	Details Not Supplied by Client
(M) Principle Dimensions:	600mm x 600mm
(N) Method of Manufacture:	Details Not Supplied by Client
(O) Laminate Cure Schedule:	Details Not Supplied by Client
(P) Test Room Conditions:	23°C, 65% RH
(Q) Conditioning Temp. & RH:	23°C, 50% RH Constant for 88 Hours
(R) Clamping Pressure (MPa):	5
(S) Testing Speed (mm/min):	2.0
(T) Specimen Prep. Method:	Specimens cut by diamond coated cutting wheel, edges sanded smooth & defect free.

### Test Equipment Details:

Test Machine:	MTS 810 Material Test System
Location:	Z104 Test Laboratory, Faculty of Engineering and Surveying, USQ
Accuracy Grading:	Grade A
Machine Calibration Date:	10/02/2005
Expiration Date:	10/02/2006
Strain Measurement Device:	MTS Extensometer Model No. 632.85F-14
Extensometer Calibration Date:	26/08/2004
Load Cell Calibration Date:	10/02/2005
Expiration Date:	10/02/2006



**Specimen Results:**

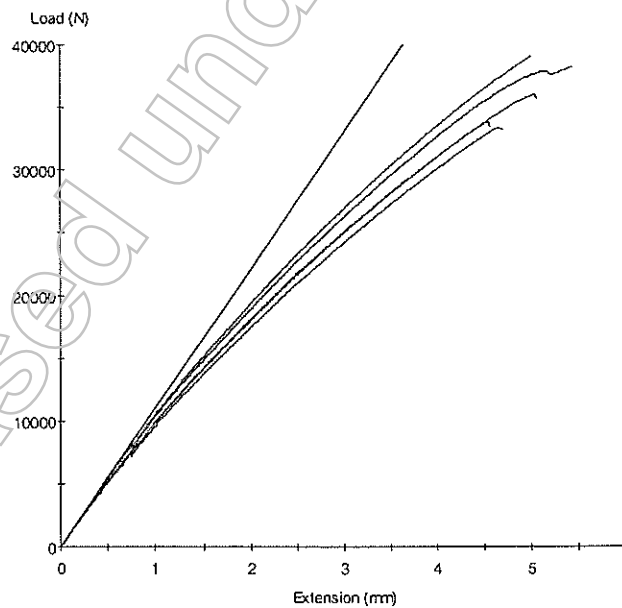
Specimen #	Thickness 1 mm	Thickness 2 mm	Thickness 3 mm	Width 1 mm	Width 2 mm	Width 3 mm	Avg Thick mm	Avg Width mm	Area mm <sup>2</sup>
1	8.62	8.66	8.70	25.10	25.08	25.09	8.66	25.09	217.28
2	8.67	8.78	8.89	25.28	25.26	25.32	8.78	25.29	222.02
3	8.96	9.04	9.09	24.80	24.83	24.87	9.03	24.83	224.24
4	9.30	9.37	9.34	25.02	25.03	25.03	9.34	25.03	233.67
5	9.45	9.72	9.80	25.19	25.18	25.18	9.66	25.18	243.19
<b>Mean</b>	<b>9.00</b>	<b>9.11</b>	<b>9.16</b>	<b>25.08</b>	<b>25.08</b>	<b>25.10</b>	<b>9.09</b>	<b>25.08</b>	<b>228.08</b>
<b>Std Dev</b>	<b>0.37</b>	<b>0.43</b>	<b>0.43</b>	<b>0.18</b>	<b>0.16</b>	<b>0.17</b>	<b>0.41</b>	<b>0.17</b>	<b>10.34</b>

**Specimen Results:**

Specimen #	Peak Load N	Peak Stress MPa	Modulus of Elasticity MPa						
1	33416	153.79	11384						
2	35999	162.14	11320						
3	33905	151.20	11895						
4	38228	163.60	11802						
5	39072	160.67	11326						
<b>Mean</b>	<b>36124</b>	<b>158.28</b>	<b>11545</b>						
<b>Std Dev</b>	<b>2519</b>	<b>5.46</b>	<b>280</b>						

**Specimen Comments:**

Specimen #	Failure Status
1	Acceptable
2	Acceptable
3	Acceptable
4	Acceptable
5	Acceptable



**Load vs Extension Plot**

Checked By: \_\_\_\_\_

Authorised Signature: \_\_\_\_\_ Date: 11-07-2005



# FLEXURE TESTING REPORT

ISO 14125:1998(E)/Method A/Class II  
 Fibre-Reinforced Plastic Composites - Determination of Flexural Properties

Test Date:  
6/07/2005

Test Method:  
STS - Laminate Flexure (ISO 14125).msm

Operator:

## Sample Information:

(A) Client Name:	Fiber Glass International
(B) Mailing Address:	P.O. Box 26
(C) Mailing Address:	Richlands
(D) Mailing Address:	Qld 4077
(E) Attn:	
(F) Phone:	07 32713944
(G) Fax:	07 32713603
(H) Client Job ID:	VMR Whitsunday Job # 284 Test Panel
(I) STS Job Number:	STS-05-104-F
(J) Layup Sequence:	Details Not Supplied by Client
(K) Test Orientation:	0 Degrees
(L) Sample Description:	Test Panel For Vessel
(M) Laminate Cure Schedule:	Details Not Supplied by Client
(N) Conditioning Temp. & Humidity:	23°C, 50% RH Constant for 88 Hours
(O) Test Room Conditions:	22°C, 42% RH
(P) Nominal Specimen Dimensions (mm):	200 x 15
(Q) Nominal Span (mm):	147
(R) Test Speed (mm/min):	4.0
(S) Surface in Compression:	Mold Side
(T) Cushion Material:	Not Used
(U) Specimen Preparation Method:	Specimens cut by diamond coated cutting wheel, edges sanded smooth & defect free.
(V) Equations Used:	ISO 14125: 1998(E) Clause 10.1

## Test Equipment Details:

Test Machine:	MTS Alliance RT/10
Location:	Z126 Test Laboratory, Faculty of Engineering and Surveying, USQ
Accuracy Grading:	Grade A
Machine Calibration Date:	31/05/2005
Expiration Date:	31/05/2006
Strain Measurement Device:	Axial Displacement of Crosshead
Strain Calibration Date:	31/05/2005
Expiration Date:	31/05/2006
Load Cell Calibration Date:	31/05/2005
Expiration Date:	31/05/2006

RECEIVED  
 25 OCT 2005  
 BUSINESS SUPPORT

**Specimen Results:**

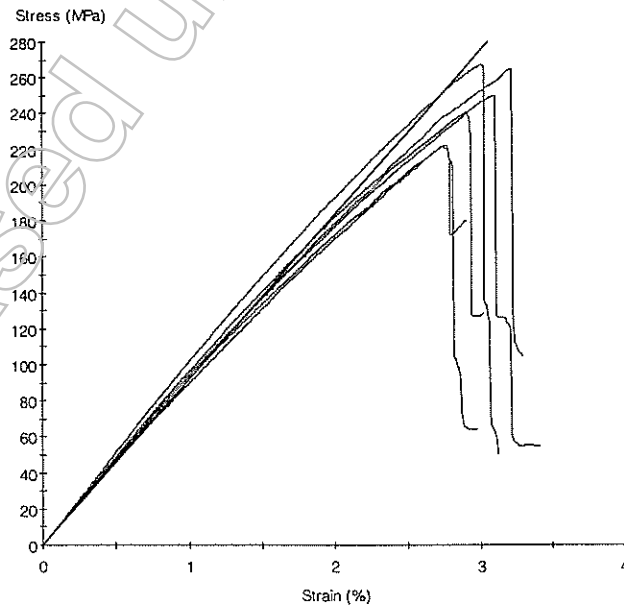
Specimen #	Thickness 1 mm	Thickness 2 mm	Thickness 3 mm	Width 1 mm	Width 2 mm	Width 3 mm	Average Width mm	Average Thickness mm	Peak Load N
1	9.08	8.98	8.90	15.13	15.09	15.10	15.11	8.99	1230
2	8.89	8.96	9.04	14.87	14.83	14.82	14.84	8.96	1434
3	8.76	8.96	9.14	15.18	15.15	15.14	15.16	8.95	1222
4	9.13	8.48	9.43	14.95	14.96	14.95	14.95	9.01	1472
5	9.21	9.58	9.53	15.03	15.05	15.00	15.03	9.44	1519
6	9.18	9.44	9.53	14.79	14.79	14.77	14.78	9.38	1422
Mean	9.04	9.07	9.26	14.99	14.98	14.96	14.98	9.12	1383
Std Dev	0.18	0.39	0.27	0.15	0.14	0.15	0.15	0.23	126

**Specimen Results:**

Specimen #	Peak Flexural Stress MPa	Deflection at Peak mm	Strain at Peak %	Flexural Modulus MPa					
1	222.29	11.09	2.77	9419					
2	265.24	12.95	3.22	9833					
3	221.73	11.05	2.75	9181					
4	267.22	12.01	3.01	10289					
5	250.10	11.82	3.10	9665					
6	240.85	11.16	2.91	9641					
Mean	244.57	11.68	2.96	9671					
Std Dev	20.02	0.74	0.19	378					

**Specimen Comments:**

Specimen #	Failure Mode
1	Tensile Fracture at Outermost Layer
2	Tensile Fracture at Outermost Layer
3	Tensile Fracture at Outermost Layer
4	Tensile Fracture at Outermost Layer
5	Tensile Fracture at Outermost Layer
6	Tensile Fracture at Outermost Layer



Stress vs Strain Plot

MARITIME SAFETY QLD  
BUSINESS SUPPORT  
25 OCT 2005  
RECEIVED

Checked By: \_\_\_\_\_

Authorised Signature: \_\_\_\_\_

Date: 11-07-2005

QUEENSLAND TRANSPORT  
DESIGN APPROVAL UNIT  
22 JUN 2005  
RECEIVED

**ANNEXURE B**

**DAILY RECORD OF LAMINATING OF F.R.P. SHIPS**

Ship: .....

Date: 31-5-05

Hull No: .....

Builder: .....

Owner: .....

Resin Type and Batch No: GELCOAT GW504032

Trade Name and Supplier: Nuplex Resins  
FGI

Reinforcement Type and Batch No: .....

Trade Name and Supplier: .....

Catalyst Type and Batch No: NR050405 Mekp NR Other .....

Trade Name and Supplier: FGI  
14 Clearview Place Brookvale NSW 2100

Area of Laminate Being Applied:

Basic Hull  Keel  Chine  Sheer

Start 7:50am Temperature ..16.... Humidity 79%  
Finish 8:35am Temperature ..17.... Humidity 70%

**DESIGN APPROVAL**

THIS PLAN HAS BEEN EXAMINED FOR DESIGN COMPLIANCE WITH THE REGULATIONS AND OR APPLICABLE RULES AS STATED

CLASS: USK CODE

OPERATIONAL LIMITS: RESTRICTED OFFSHORE

APPROVED: [Signature]

UP TO 50 N. MILES FROM SAFE HARBOUR

MARITIME SAFETY QUEENSLAND DATE: 20/5/05

ACCREDITATION No: 043

12/11/96

Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...

Total Lamination Time ..... 45 min .....

Total Reinforcement Used: C/R ... CSM ... W/R ... Other ...

Total Resin Used: Polyester Iso ... Ortho ... Vinylester ... Epoxy : Gel coat - 45kg

Percentage Catalyst: ..... 1% .....

Resin/Fibre Ratio: .....

Weight of Reinforcement Per Metre<sup>2</sup> at the end of Each Day: .....

APPLICATION GUN  HAND

Average Gel time: ..... 40 min .....

Time from Gel Coat application to Hull Removal from Mould: .....

I hereby certify that I sincerely believe that the information provided above is a correct record.

Signature

Company Position: Gun Operator

Date: 31-5-05

12/11/96

ANNEXURE B

DAILY RECORD OF LAMINATING OF F.R.P. SHIPS

Ship: ..... Date: 31-5-05

Hull No: .....

Builder: .....

Owner: .....

Resin Type and Batch No: Derakane NV 503364S

Trade Name and Supplier: Nuplex Resins  
FGI

Reinforcement Type and Batch No: Continuous Roving  
359A AA 2400

Trade Name and Supplier: .....

Catalyst Type and Batch No: NROSOLOS Mekp NR Other .....

Trade Name and Supplier: FGI  
Brookvale NSW 2100

Area of Laminate Being Applied:

Basic Hull  Keel  Chine  Sheer

Start 10:50 am Temperature 22..... Humidity 78%  
Finish 3:15 pm Temperature 23..... Humidity 75%



12/11/96

Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...

Total Lamination Time 3 hrs 55 min

Total Reinforcement Used: C/R ... CSM ... W/R ... Other ... 20 kg

Total Resin Used: Polyester Iso ... Ortho ... Vinylester  Epoxy 40 kg

Percentage Catalyst: 1%

Resin/Fibre Ratio: 2 to 1

Weight of Reinforcement Per Metre<sup>2</sup> at the end of Each Day: .....

APPLICATION GUN  HAND

Average Gel time: 30 min

Time from Gel Coat application to Hull Removal from Mould: .....

I hereby certify that I sincerely believe that the information provided above is a correct record.

Signature

Company Position: Gun Operator

Date: 31-5-05

**ANNEXURE B**

**DAILY RECORD OF LAMINATING OF F.R.P. SHIPS**

Ship: .....

Date: 1-6-05

Hull No: .....

Builder: .....

Owner: .....

Resin Type and Batch No: Derakane NV 5033645

Trade Name and Supplier: Nuplex Resins

FG1

Reinforcement Type and Batch No: Continuous Roving

359A AA 2400

Trade Name and Supplier: .....

Catalyst Type and Batch No: NR 050405 Mekp NR Other .....

Trade Name and Supplier: FG1

Brookvale NSW 2100

Area of Laminate Being Applied:

Basic Hull  Keel  Chine  Sheer

Start 7:30 am Temperature 15 .....

Humidity

Finish 11:30 am Temperature 21 .....

Humidity

68  
73  
%

12/11/96

Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...

Total Lamination Time 4 hrs .....

Total Reinforcement Used: C/R  CSM ... W/R ... Other ... 20 kg

Total Resin Used: Polyester Iso ... Ortho ... Vinylester  Epoxy 40 kg

Percentage Catalyst: 1% .....

Resin/Fibre Ratio: 2 to 1 .....

Weight of Reinforcement Per Metre<sup>2</sup> at the end of Each Day: .....

APPLICATION GUN  HAND

Average Gel time: 30 min .....

Time from Gel Coat application to Hull Removal from Mould: .....

I hereby certify that I sincerely believe that the information provided above is a correct record.

Signature

Company Position: Gun Operator

Date: 1-6-05

**ANNEXURE B**

**DAILY RECORD OF LAMINATING OF E.R.P. SHIPS**

Ship: ..... Date: 1-6-05

Hull No: .....

Builder: .....

Owner: .....

Resin Type and Batch No: Polyplex R/W ISO WXF 45  
WR504021

Trade Name and Supplier: Nudex Resins  
Batany NSW 2019

Reinforcement Type and Batch No: Continuous Rovings  
359A AA 2400

Trade Name and Supplier: .....

Catalyst Type and Batch No: NR 050405 Mekp NR Other .....

Trade Name and Supplier: FGI  
Brookvale NSW 2100

Area of Laminate Being Applied:

Basic Hull  Keel  Chine  Sheer

Start 1:45 pm Temperature 22..... Humidity 76%

Finish 3:30 pm Temperature 20..... Humidity 73%

12/11/96

Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...

Total Lamination Time ..... 1hr 45 min .....

Total Reinforcement Used: C/R ✓ CSM ... W/R ... Other ... - 17 kg -

Total Resin Used: Polyester Iso ✓ Ortho ... Vinylester ... Epoxy - 40 kg

Percentage Catalyst: ..... 1.25% ..... Keula 4 kg

Resin/Fibre Ratio: ..... 2 to 1 .....

Weight of Reinforcement Per Metre<sup>2</sup> at the end of Each Day: .....

APPLICATION GUN  HAND

Average Gel time: ..... 30 min .....

Time from Gel Coat application to Hull Removal from Mould: .....

I hereby certify that I sincerely believe that the information provided above is a correct record.

Signature

Company Position: Gun Operator

Date: 1/6.05

ANNEXURE B

DAILY RECORD OF LAMINATING OF F.R.P. SHIPS

Ship: .....

Date: 2-6-05

Hull No: .....

Builder: .....

Owner: .....

Resin Type and Batch No: Polyplex R/W ISO WXF-45  
WR504021

Trade Name and Supplier: Nuplex Resins

Batany NSW 2019

Reinforcement Type and Batch No: Continuous Rovings  
359A AA 2400

Trade Name and Supplier:

Catalyst Type and Batch No: NR050405 Mekp NR Other

Trade Name and Supplier: FGI

Brookvale NSW 2100

Area of Laminate Being Applied:

Basic Hull  Keel  Chine  Sheer

Start 8:15 am Temperature 16..... Humidity

Finish 2:00 pm Temperature 20.... Humidity

6.4%  
6.8%

12/11/96

Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...

Total Lamination Time ..... 3hrs 45min

Total Reinforcement Used: C/R ✓ CSM ... W/R ... Other ... 38 Kg

Total Resin Used: Polyester Iso ✓ Ortho ... Vinylester ... Epoxy 92 Kg

Percentage Catalyst: ..... 1.25% KEVLA 8Kg

Resin/Fibre Ratio: ..... 2 to 1

Weight of Reinforcement Per Metre<sup>2</sup> at the end of Each Day: .....

APPLICATION GUN  HAND

Average Gel time: ..... 40 min

Time from Gel Coat application to Hull Removal from Mould: .....

I hereby certify that I sincerely believe that the information provided above is a correct record.

Signature

Company Position: Gun Operator

Date: 2/6/05

**ANNEXURE B**

**DAILY RECORD OF LAMINATING OF E.R.P. SHIPS**

Ship: ..... Date: 3-6-05

Hull No: .....

Builder: .....

Owner: .....

Resin Type and Batch No: Polyplex R/W ISO WXF 45  
WR504021

Trade Name and Supplier: Nudex Resins  
Batany NSW 2019

Reinforcement Type and Batch No: Continuous Rovings  
359A AA 2400

Trade Name and Supplier: .....

Catalyst Type and Batch No: NR050405 Mekp NR Other .....

Trade Name and Supplier: FGI  
Brookvale NSW 2100

**Area of Laminate Being Applied:**

Basic Hull  Keel  Chine  Sheer

Start 9:50 am Temperature 18 Humidity

Finish 12:30 pm Temperature 20 Humidity

71  
73  
%



12/11/96

Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...

Total Lamination Time ..... 2 hrs 20 min

Total Reinforcement Used: C/R  CSM ... W/R ... Other ..... 34 Kg

Total Resin Used: Polyester Iso ... Ortho ... Vinylester ... Epoxy ..... 80 Kg

Percentage Catalyst: ..... 1.25 ..... Keula 6 Kg

Resin/Fibre Ratio: ..... 2 to 1

Weight of Reinforcement Per Metre<sup>2</sup> at the end of Each Day: .....

APPLICATION GUN  HAND

Average Gel time: ..... 45 min

Time from Gel Coat application to Hull Removal from Mould: .....

I hereby certify that I sincerely believe that the information provided above is a correct record.

Signature

Company Position: Gun Operator

Date: 3-6-05

**ANNEXURE B**

**DAILY RECORD OF LAMINATING OF F.R.P. SHIPS**

Ship: ..... Date: 6-6-05

Hull No: .....

Builder: .....

Owner: .....

Resin Type and Batch No: Polyplex R/W ISO WXF-45  
WR504021

Trade Name and Supplier: Nuplex Resins

Batany NSW 2019

Reinforcement Type and Batch No: Continuous Rovings  
359A AA 2400

Trade Name and Supplier: .....

Catalyst Type and Batch No: NR 050405 Mekp NR Other .....

Trade Name and Supplier: FGI .....

Brookvale NSW 2100

Area of Laminate Being Applied:

Basic Hull  Keel  Chine  Sheer

Start 8:35 am Temperature 18 Humidity 62%

Finish 11:30 am Temperature 22 Humidity 76%

12/11/96

Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...

Total Lamination Time 2 hrs 55 min

Total Reinforcement Used: C/R  CSM ... W/R ... Other ...

28KG

Total Resin Used: Polyester Iso  Ortho ... Vinylester ... Epoxy

70 kg

Percentage Catalyst: 1.25%

Keula 6 kg

Resin/Fibre Ratio: 2 to 1

Weight of Reinforcement Per Metre<sup>2</sup> at the end of Each Day: .....

APPLICATION  GUN  HAND

Average Gel time: 30 min

Time from Gel Coat application to Hull Removal from Mould: .....

I hereby certify that I sincerely believe that the information provided above is a correct record.

Signature

Company Position:

Date: 6-6-05

**ANNEXURE B**

**DAILY RECORD OF LAMINATING OF F.R.P. SHIPS**

Ship: ..... Date: 7-6-05

Hull No: .....

Builder: .....

Owner: .....

Resin Type and Batch No: Polyplex R/W ISO WXF 45  
WR 504021

Trade Name and Supplier: Nudex Resins  
Botany NSW 2019

Reinforcement Type and Batch No: Continuous Rovings  
359A AA 2400

Trade Name and Supplier: .....

Catalyst Type and Batch No: NR 050405 Mekp NR Other .....

Trade Name and Supplier: FG 1  
Brookvale NSW 2100

**Area of Laminate Being Applied:**

Basic Hull  Keel  Chine  Sheer

Start 10:15 am Temperature 20 Humidity 60%  
Finish 3:30 pm Temperature 23 Humidity 75%

12/11/96

Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...

Total Lamination Time ..... 4 HRS 25 MIN

Total Reinforcement Used: C/R  CSM ... W/R ... Other ... 65 Kg

Total Resin Used: Polyester Iso  Ortho ... Vinylester ... Epoxy 153 Kg

Percentage Catalyst: 1.25% ..... Kevlar 6 Kg

Resin/Fibre Ratio: 2 to 1 .....

Weight of Reinforcement Per Metre<sup>2</sup> at the end of Each Day: .....

APPLICATION GUN  HAND

Average Gel time: 40 min .....

Time from Gel Coat application to Hull Removal from Mould: .....

I hereby certify that I sincerely believe that the information provided above is a correct record.

Signature

Company Position: GVN Operator

Date: 7-6-05

**ANNEXURE B**

**DAILY RECORD OF LAMINATING OF F.R.P. SHIPS**

Ship: ..... Date: 8-6-05

Hull No: .....

Builder: .....

Owner: .....

Resin Type and Batch No: Polyplex R/W ISO WXF-45  
WR504021

Trade Name and Supplier: Nudex Resins  
Batany NSW 2019

Reinforcement Type and Batch No: Continuous Rovings  
359A AA 2400

Trade Name and Supplier: .....

Catalyst Type and Batch No: NR 050405 Mekp NR Other .....

Trade Name and Supplier: FG1  
Bookvale NSW 2100

Area of Laminate Being Applied:

Basic Hull  Keel  Chine  Sheer

Start 8:30 am Temperature 17 Humidity 70%  
Finish 2:15 pm Temperature 22 Humidity 78%

12/11/96

Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...
Start .....	Temperature .....	Humidity ...
Finish .....	Temperature .....	Humidity ...

Total Lamination Time ..... 4 hrs 55 min .....

Total Reinforcement Used: C/R  CSM ... W/R ... Other ... 66 1/2 kg

Total Resin Used: Polyester Iso  Ortho ... Vinylester ... Epoxy 150 kg

Percentage Catalyst: 1.25% ..... Keula 6kg

Resin/Fibre Ratio: 2 + 0.1 .....

Weight of Reinforcement Per Metre<sup>2</sup> at the end of Each Day: .....

APPLICATION GUN  HAND

Average Gel time: 40 min .....

Time from Gel Coat application to Hull Removal from Mould: .....

I hereby certify that I sincerely believe that the information provided above is a correct record.

Signature

Company Position: Gun Operator .....

Date: 8-6-05 .....