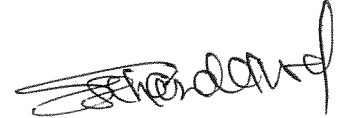


**BALLISTIC EVALUATION REPORT**

|   |                                     |
|---|-------------------------------------|
| IFS File No.                                    | IFS/20/BER/83                       |
| Date of Report                                  | 22/06/2020                          |
| User Request Letter No.                         | --                                  |
| Acceptance of tender No./<br>Tender Enquiry No. | --                                  |
| Date of Trails                                  | 20/06/2020                          |
| Armor Type                                      | Bullet Resistant Glass (BRG)        |
| Submitted By                                    | FG Glass Industries Private Limited |
| User/Indenter                                   | --                                  |



**S.G Khandelwal**  
Head

**Note:-**

1. The Test result of Ballistic evaluation of **Two (02) BRG**, of **FG Glass Industries Private Limited** is as per the sheet attached here with.
2. The test articles were brought to IFS, Gandhinagar by the User/Supplier Representative as per their own specification / fabrication process.
3. IFS, Gandhinagar is not responsible, directly or indirectly, for the quality of production lots being manufactured by the firm.
4. The report is Valid only for the particular item evaluated against specified ammunition & publication of these results in any abridges form is not allowed without the written approval from Director, IFS, Gandhinagar.
5. The tested and untested samples are returned back to the user representative after completion of the testing.
6. The test procedure is followed as per NIJ 0108.01 (Level IIIA & Level III).

Encl: Compliance Test 01 to 02.

**COMPLIANCE TEST-01**

**BASIC DETAILS**

|                                |                           |                           |                             |
|--------------------------------|---------------------------|---------------------------|-----------------------------|
| <b>IFS Test Sample ID</b>      | IFS/20/BRG/83/FG-Glass/01 | <b>Trail Date</b>         | 20/06/2020                  |
| <b>Armour Type</b>             | BRG                       | <b>Plate No</b>           | -                           |
|                                |                           | <b>Heat No</b>            | -                           |
|                                |                           | <b>Grade</b>              | -                           |
| <b>Type of Firearm</b>         | Barrel No: SN 5285        | <b>Distance Of Firing</b> | 05 Meter                    |
| <b>Type of Ammunition</b>      | 9 × 19 mm                 | <b>Room Temperature</b>   | 42° C                       |
| <b>Reference Velocity</b>      | 430 ± 15 m/s              | <b>Humidity</b>           | 53%                         |
| <b>Conditioning If any</b>     | -                         | <b>Time IN:-</b>          | <b>Time Out:-</b>           |
| <b>BFS Acceptance Criteria</b> | -                         | <b>Testing Standard</b>   | NIJ0108.01<br>(Level III-A) |

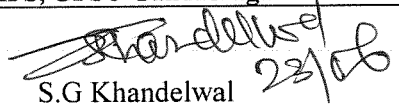
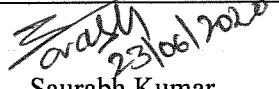
**SAMPLE DESCRIPTION**

|                    |                    |                     |                       |                    |
|--------------------|--------------------|---------------------|-----------------------|--------------------|
| <b>Sample Type</b> | <b>Length (mm)</b> | <b>Breadth (mm)</b> | <b>Thickness (mm)</b> | <b>Weight (Kg)</b> |
| BRG                | 500                | 500                 | 23.21                 | 11.792             |

**TEST DATA**

| Shot No. | Fair /Unfair | Angle of Firing | Velocity (m/sec) | Perforation/No Perforation/Crack | Remark |
|----------|--------------|-----------------|------------------|----------------------------------|--------|
| 1.       | Fair         | 90°             | 423.4            | No Perforation                   |        |
| 2.       | Fair         | 90°             | 430.2            | No Perforation                   |        |
| 3.       | Fair         | 90°             | 434.7            | No Perforation                   |        |
| 4.       | Fair         | 90°             | 440.3            | No Perforation                   |        |
| 5.       | Fair         | 90°             | 445.0            | No Perforation                   |        |

Trail Officer, IFS, GFSU Gandhinagar.

|  |   |
|--|---|
| <br>S.G Khandelwal<br>Head<br>Ballistic Research Centre & Testing Range | <br>Saurabh Kumar<br>Scientific Officer (Ballistics)<br>Ballistic Research Centre & Testing Range |
|--|---|

**Manufacturer Representative(s)witnessed the trails:-**



विद्यया अमृतं अश्नुते

**COMPLIANCE TEST-02**

**BASIC DETAILS**

|                                |                           |                           |                        |
|--------------------------------|---------------------------|---------------------------|------------------------|
| <b>IFS Test Sample ID</b>      | IFS/20/BRG/83/FG-Glass/02 | <b>Trail Date</b>         | 20/06/2020             |
| <b>Armour Type</b>             | BRG                       | <b>Plate No</b>           | -                      |
|                                |                           | <b>Heat No</b>            | -                      |
|                                |                           | <b>Grade</b>              | -                      |
| <b>Type of Firearm</b>         | Barrel No: SN 4313        | <b>Distance Of Firing</b> | 10 Meter               |
| <b>Type of Ammunition</b>      | 7.62 × 51 mm              | <b>Room Temperature</b>   | 42° C                  |
| <b>Reference Velocity</b>      | 838 ± 15 m/s              | <b>Humidity</b>           | 53%                    |
| <b>Conditioning If any</b>     | -                         | <b>Time IN:-</b>          | <b>Time Out:-</b>      |
| <b>BFS Acceptance Criteria</b> | -                         | <b>Testing Standard</b>   | NIJ0108.01 (Level III) |

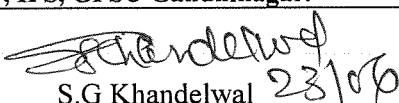
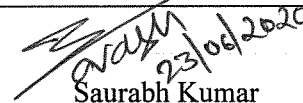
**SAMPLE DESCRIPTION**

| Sample Type | Length (mm) | Breadth (mm) | Thickness (mm) | Weight (Kg) |
|-------------|-------------|--------------|----------------|-------------|
| BRG         | 500         | 500          | 42.30          | 23.07       |

**TEST DATA**

| Shot No. | Fair /Unfair | Angle of Firing | Velocity (m/sec) | Perforation/No Perforation/Crack | Remark |
|----------|--------------|-----------------|------------------|----------------------------------|--------|
| 1.       | Fair         | 90°             | 843.2            | No Perforation                   | -      |
| 2.       | Fair         | 90°             | 828.2            | No Perforation                   |        |
| 3.       | Fair         | 90°             | 829.3            | No Perforation                   |        |
| 4.       | Fair         | 90°             | 843.2            | No Perforation                   |        |
| 5.       | Fair         | 90°             | 831.0            | No Perforation                   |        |

**Trail Officer, IFS, GFSU Gandhinagar.**

|   |  |
|---|--|
| <br><b>S.G Khandelwal</b><br>Head<br>Ballistic Research Centre & Testing Range | <br><b>Saurabh Kumar</b><br>Scientific Officer (Ballistics)<br>Ballistic Research Centre & Testing Range |
| <b>Manufacturer Representative(s)witnessed the trails:-</b>   |  |