

Indoor Temperature & Humidity Level Inspection

ACS Textiles (Bangladesh) Ltd. & ACS Towel Limited

Inspection Ref. No.: C/T 11275

Contact Us

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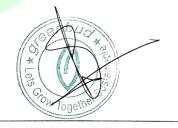








| | Con aval Infor | | | |
|--|-----------------------|------------------------------|----------|---|
| | General Infor | mation | | |
| Invoice Reference No: GB/ | 2024/08/80 | Inspection Date | e: 09.09 | 9.2024 |
| Inspection Reference No: C | C/T 11275 | Inspection Dura | ation:1 | 1am-5pm |
| Report Generation Date: | 15.09.2024 | Inspection Des & Humidity | cription | n: Indoor Temperature |
| Report Submission Date: | 22.09.2024 | Inspection Loca | ation: I | nside Factory |
| Inspection Standards: 2004 | -/108/EEC | Building | | |
| Company Name: | | | | Contact Person: |
| ACS Textiles (Bangladesh ACS Towel Limited | Md. Ruhul Alam Sharif | | | |
| Address: Tetlabo, Barpa, R | upgonj, Narayangonj. | GM, Compliance | | |
| | | _ | | |
| | On Site Inspecti | on Team | | |
| Md. Shaharia Ahmed | | | | Tanzir Hosen |
| Executive (Operation) B.Sc. in Environmental Science | | | | Chemist (Operation) |
| Report Prepared by | ence | | | B.Sc. in Chemistry Quality Checked |
| Show, | | | | Most |
| Md. Shaharia Ahmed Executive (Operation) | | | | Mosharof Hossain Manager (Operation) |
| B.Sc. in Environmental Scie | Report Appro | | Sc. in E | Environmental Science |
| | | | | |



Engr. Syed Tasnem Mahmood

Chief Environmental Engineer & CEO
B.Sc. & M.Sc. (Civil and Environmental Engineering)
MIEB No.: M/35960







Introduction:

Humidity and Temperature level is measured together to understand the comfort level of the work environment. If the temperature rises too high along with the high humidity, then the work environment becomes more uneven for working and other operational condition. Along with the performance and longevity of certain machinery depends on the relation between Humidity and Temperature.

GREENBUD Testing & Inspection Services Private Limited has been hired to test the temperature & humidity level of **ACS Textiles (Bangladesh) Ltd. & ACS Towel Limited.** GREENBUD covered all the production sections for testing the temperature & humidity level and generated a report according to the activity occupancy of the area.

In this report Temperature & Humidity level has been checked for all the production sections of Building.

Method of Analysis:

Inspection of indoor temperature and humidity level was done using direct reading instruments. During the analysis, a standard work instruction stated in the TP-GB-05 was followed.

Recommended Value for Temperature and Humidity:

| Parameters | Standard (ASHRAE) ¹ | Standard (OSHA 4185) ² | Standard (OSHA) ³ |
|---------------------|-----------------------------------|--|---------------------------------|
| Turumeters | Workplace | Workplace | Office Area |
| Temperature (°C) | 20°C -26°C | Caution less than 26°C HI; Warning 26°C to 34°C HI; Danger at 35°C HI or higher. | 20°C-24°C |
| Humidity (%) | 30%-60% | - | 20%-60% |

Note: The normal levels of relative humidity and temperature for indoor air will vary widely from region (climate) to region (climate).

 $^{^{1}\} https://www\underline{7.nau.edu/itep/main/eeop/docs/airqlty/AkIAQ_ThermalComfort.pdf}$

² https://www.osha.gov/sites/default/files/publications/OSHA4185.pdf

 $^{^{3} \ \}underline{https://www.osha.gov/laws-regs/standardinterpretations/2003-02-24}$







Indoor Temperature Level Inspection Result: (ACS Textiles (Bangladesh) Ltd.)

| Packing Section Working C0°C-35°C 29 V V V V V V V V V | | | Inspection | ı Area | | Inspection | Status | |
|--|-------|-----------------------|--------------|------------------|-----------|---|-------------------------|--------------|
| 1 | SI No | Building No | Floor/Level | Section | Condition | Comparative Standard (°C) | Obtained Result (°C) | Within Limit |
| Accessories Store | | | Ground Floor | | | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | | |
| A | | | | | | | | |
| Sizing & Weaving Working C0°C-35°C 31 V | | Building No-01 | 1st Floor | | | , | | |
| Prayer Room Working C20°C-35°C) 31 V | | | 2nd Floor | | | | | |
| Cutting Section | | | | 1 3 | | | | |
| Seeding Section Working C20°C-35°C 30 V | - | | Ground Floor | | | | | |
| Stitching Section | | | | | | | | |
| Building no-02 | - | | | | | | | |
| 10 | | Building no-02 | 1 . 17 | | | | | |
| Packing Section Working (20°C-35°C) 31 V | | C | 1st Floor | | | | | |
| 13 | - | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | Consul Flags | | | | | |
| Tit Floor | - | Duilding No 02 | Ground Floor | | | | | |
| 17 | | building ino-03 | 1st Floor | | | | | |
| Building No-04 | | | | | | | | |
| Twisting & Doubling Working (20°C-35°C) 29 N | - | | Ground Floor | | | | | |
| Section Sub-Station Working Co\(^{0}C-35\(^{0}C) \) 29 \(\sqrt{1} \) 22 3 3 3 3 3 3 3 3 | | Building No-04 | Ground Proof | | | | | |
| Sub-Station Working (20°C-35°C) 28 V | - | | 1st Floor | | | | | |
| Building-05 | | | | | | | | |
| Technical Room Working (20°C-35°C) 30 N | - | Ruilding_05 | | | | | | |
| Bleaching Working (20°C-35°C) 31 N | | Building 03 | 1st Floor | | | | | |
| Dyeing Working (20°C-35°C) 31 N | | | | | | | | |
| Building-06 Building-06 Ground Floor Dyeing Finishing Working (20°C-35°C) 30 \times | | | | | | | | |
| Dyeing Finishing Working (20°C-35°C) 31 √ | - | | | | | | | |
| Chemical Sub Store | - | Building-06 | Ground Floor | | | | | |
| Printing Section Working (20°C-35°C) 31 √ | - | Dunaing 00 | Ground 11001 | | | | | |
| Stepton Step | - | | | | | | | |
| Stephane Store Working (20°C-35°C) 32 √ | | | | | | | | |
| Step | | | G 1FI | | | | | $\sqrt{}$ |
| 33 Building-07 1st Floor General Store Working (20°C-35°C) 29 √ 35 2nd Floor Worker's Canteen Working (20°C-35°C) 29 √ 36 37 Building-10 Ground Floor Washing Area Working (20°C-35°C) 29 √ 37 Building-10 Ground Floor Washing Area Working (20°C-35°C) 29 √ 38 39 40 Building-11 Ground Floor Start Floor Fabric Store Working (20°C-35°C) 27 √ 40 41 Floor Fabric Store Working (20°C-35°C) 25 √ 42 43 44 44 45 44 45 45 46 Washing Section Working (20°C-35°C) 29 √ 40 Warping Section Working (20°C-35°C) 29 √ 41 Warping Section Working (20°C-35°C) 29 √ 42 Weaving Section Working (20°C-35°C) 29 √ 44 Warping Section Working (20°C-35°C) 29 √ 45 Sizing Section Working (20°C-35°C) 29 √ 46 Rasing Section Working (20°C-35°C) 26 √ 47 Rasing Section Working (20°C-35°C) 26 √ 48 Warping Section Working (20°C-35°C) 26 √ 49 Rasing Section Working (20°C-35°C) 28 √ 40 Warping Section Working (20°C-35°C) 28 √ 41 Warping Section Working (20°C-35°C) 28 √ | | | Ground Floor | | | | 28 | |
| 34 35 2nd Floor 2nd Floor Worker's Canteen Working (20°C-35°C) 29 √ 36 | | Building-07 | 1 -4 E1 | | | | | $\sqrt{}$ |
| 2nd Floor Worker's Canteen Working (20°C-35°C) 28 √ | | Č | 1st Floor | | | | 29 | $\sqrt{}$ |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 35 | | 2nd Floor | | | | 28 | |
| 37 Building-10 Ground Floor Dryer Machine Working (20°C-35°C) 27 √ 38 39 40 Building-11 Ground Floor Chemical Store Working (20°C-35°C) 27 √ 40 41 Ist Floor Fabric Store Working (20°C-35°C) 25 √ 41 42 2 43 44 45 Building-12 Building-12 Ground Floor Ground Floor Warping Section Working (20°C-35°C) 29 √ 42 43 44 45 Building-12 Ground Floor Warping Section Working (20°C-35°C) 29 √ 44 5 Sizing Section Working (20°C-35°C) 29 √ 5 Stenter Machine Working (20°C-35°C) 26 √ 6 Rasing Section Working (20°C-35°C) 26 √ 7 Rasing Section Working (20°C-35°C) 26 √ 8 Rasing Section Working (20°C-35°C) 28 √ 7 Stenter Machine Working (20°C-35°C) 28 √ 8 Stenter Machine Working (20°C-35°C) 29 √ 9 Stenter Machine Working (20°C-35°C) 20 √ 9 Stenter Machine Working (20°C-35°C) 20 √ 9 Stenter Machine Working (20°C-35°C) 20 √ 9 | | Duildin = 10 | | | | | 29 | |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 37 | Building-10 | Ground Floor | | | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 27 | |
| Building-11 Building-11 St Floor Fabric Store Working (20°C-35°C) 25 √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ | | | Ground Floor | Chemical Store | Working | | | |
| 40 | - | Ruilding 11 | | Quilting Machine | Working | | | |
| 42 43 44 45 46 Building-12 Building-12 Weaving Section Working (20°C-35°C) 29 √ | | Dununig-11 | | | Working | | | |
| 43 44 45 Building-12 Ground Floor Sizing Section Working (20°C-35°C) 29 √ | | | 2nd Floor | | | | | |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | - | | | , | | | | |
| Building-12 Stenter Machine Working (20°C-35°C) 26 √ | | | | , | | | | |
| 45 Stellier Machine Working $(20^{\circ}\text{C-}35^{\circ}\text{C})$ 20 $$ 46 Rasing Section Working $(20^{\circ}\text{C-}35^{\circ}\text{C})$ 28 $$ | | Building 12 | Ground Floor | | | | | |
| | | Dunuing-12 | | | | | | |
| | | | | | Working | | 28 | |
| 47 | 47 | | 1st Floor | Quilting Section | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 28 | |





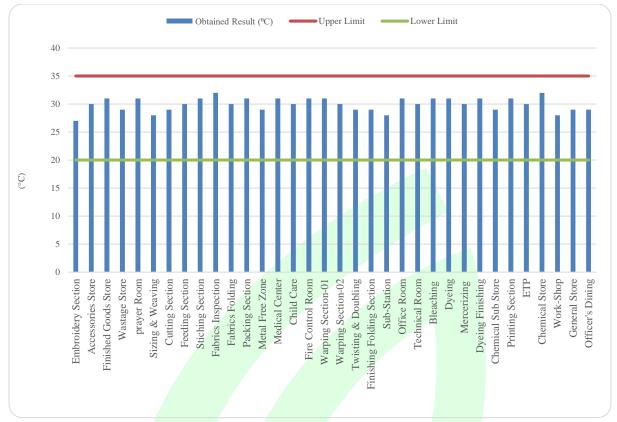


| | | Inspection | ı Area | | Inspection | Status | |
|-------|-------------|--------------|-------------------------|-----------|---|-------------------------|--------------|
| SI No | Building No | Floor/Level | Section | Condition | Comparative Standard (°C) | Obtained Result (°C) | Within Limit |
| 48 | | | Cutting Section | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 27 | $\sqrt{}$ |
| 49 | | | Feeding Section | Working | $(20^{0}\text{C}-35^{0}\text{C})$ | 28 | $\sqrt{}$ |
| 50 | | | Stitching Section | Working | $(20^{0}\text{C}-35^{0}\text{C})$ | 29 | |
| 51 | Building-12 | 1st Floor | Fabrics Inspection | Working | $(20^{0}\text{C}-35^{0}\text{C})$ | 29 | |
| 52 | Dullding-12 | 180 1 1001 | Fabrics Folding Section | Working | $(20^{0}\text{C}-35^{0}\text{C})$ | 28 | |
| 53 | | | Packing Section | Working | $(20^{0}\text{C}-35^{0}\text{C})$ | 29 | |
| 54 | | | Metal Free Zone | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 27 | |
| 55 | | | Finished Goods Store | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 27 | |
| 56 | Building-13 | Ground Floor | Office Area | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 27 | |
| 57 | | Ground Floor | Digital Printing | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 29 | |
| 58 | Building-14 | 1st Floor | Tufting | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 29 | |
| 59 | | 2nd Floor | Tufting | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 30 | |
| 60 | | | Admin & Compliance | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 26 | |
| 61 | | Ground Floor | Accounts & Finance | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 28 | |
| 62 | | | Commercial | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 28 | |
| 63 | | | Show Room | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 27 | |
| 64 | Building-15 | 1st Floor | Display Center | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 28 | $\sqrt{}$ |
| 65 | | 1St Floor | Marketing | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 29 | $\sqrt{}$ |
| 66 | | | Commercial | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 29 | $\sqrt{}$ |
| 67 | | 2nd Floor | Sample Room | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 28 | $\sqrt{}$ |
| 68 | | Ziiu Fioof | IT Room | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 29 | V |

^{**}Abbreviations and Acronyms: ${}^{0}C = Temperature Measuring Unit.$







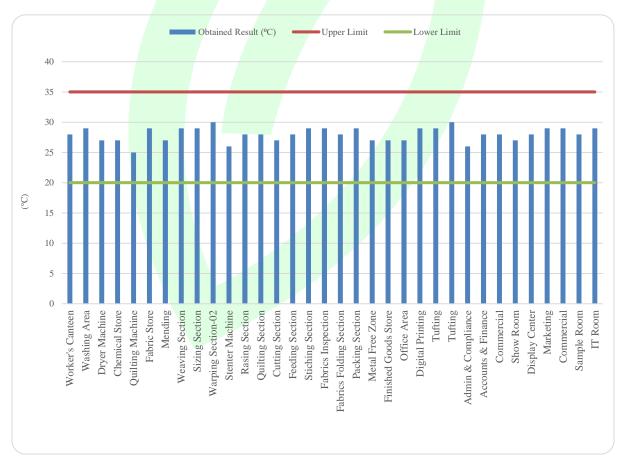


Figure: Temperature level in the working area





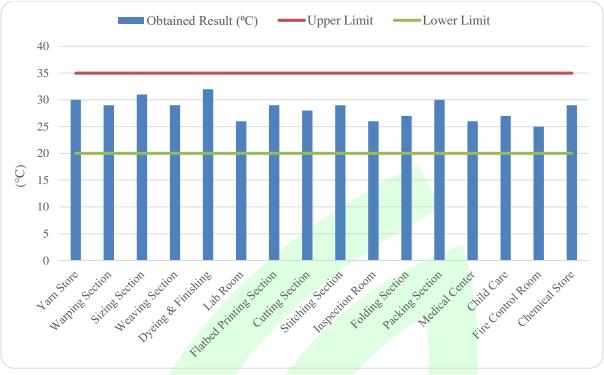
Indoor Temperature Level Inspection Result: (ACS Towel Limited)

| | | Inspect | ion Area | | Inspection | Inspection Status | | | |
|-------|-------------------------------|---------------|---------------------------|-----------|---|--------------------------|--------------|--|--|
| SI No | SI No Building No Floor/Level | | Section | Condition | Comparative Standard (°C) | Obtained Result (°C) | Within Limit | | |
| 1 | | Basement | Yarn Store | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 30 | | | |
| 2 | | | Warping Section | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 29 | | | |
| 3 | | | Sizing Section | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 31 | | | |
| 4 | | Ground Floor | Weaving Section | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 29 | | | |
| 5 | | Ground Proof | Dyeing & Finishing | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 32 | | | |
| 6 | Building-1 | | Lab Room | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 26 | | | |
| 7 | Dunung-1 | | Flatbed Printing Section | Working | $(20^{0}\text{C}-35^{0}\text{C})$ | 29 | | | |
| 8 | | | Cutting Section | Working | $(20^{0}\text{C}-35^{0}\text{C})$ | 28 | | | |
| 9 | | | Stitching Section | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 29 | | | |
| 10 | | 1st Floor | Inspection Room | Working | $(20^{0}\text{C}-35^{0}\text{C})$ | 26 | \checkmark | | |
| 11 | | | Folding Section | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 27 | | | |
| 12 | | | Packing Section | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 30 | | | |
| 13 | | Ground Floor | Medical Center | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 26 | | | |
| 14 | Building-2 | 1 at Elasa | Child Care | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 27 | | | |
| 15 | _ | 1st Floor | Fire Control Room | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 25 | | | |
| 16 | | Carra d Elega | Chemical Store | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 29 | | | |
| 17 | D '11' 2 | Ground Floor | Work Shop | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 30 | | | |
| 18 | Building-3 | 1 . (F1 | General Store | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 29 | | | |
| 19 | | 1st Floor | Officer's Dining | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 26 | | | |
| 20 | Building-3 | 2nd Floor | Worker's Dining | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 28 | | | |
| 21 | | | Compressor | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 30 | | | |
| 22 | D '11' 4 | C 1FL | Generator Room | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 32 | | | |
| 23 | Building-4 | Ground Floor | Boiler Room | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 31 | | | |
| 24 | | | Technical Director Office | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 26 | | | |
| 25 | | Con 1 El | Chemical Store | Working | (20°C-35°C) | 29 | $\sqrt{}$ | | |
| 26 | D:1.41 5 | Ground Floor | Quilting Machine Room | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 27 | | | |
| 27 | Building-5 | 1st Floor | Fabric Store | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 29 | | | |
| 28 | | 2nd Floor | Mending Area | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 30 | | | |
| 29 | Building-6 | Ground Floor | ETP | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 31 | | | |
| 30 | Building-7 | Ground Floor | Security Post | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 29 | | | |
| 31 | Building-8 | Ground Floor | Electrical Sub-Station | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 30 | | | |
| 32 | She | ed-01 | Wastage Area | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 32 | | | |
| 33 | She | ed-02 | Wastage Area | Working | $(20^{\circ}\text{C}-35^{\circ}\text{C})$ | 31 | | | |

^{**}Abbreviations and Acronyms: ${}^{\theta}C = Temperature Measuring Unit.$







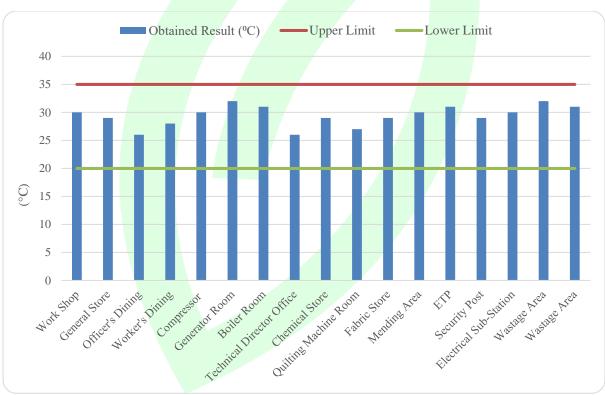


Figure: Temperature level in the working area







Indoor Humidity Level Inspection Result: (ACS Textiles (BD) Ltd.)

| | | Inspection | on Area | | Inspection | n Statu | s |
|--------|-----------------------|--------------|--------------------------------|-----------|-----------------------------|-----------------|--------------|
| | | p | | | | | |
| Sl. No | Building No | Floor/Level | Section | Condition | Comparative Standard (%) | Obtained Result | Within Limit |
| 1 | | C 1 F1 | Embroidery Section | Working | (20%-60%) | 57 | √ |
| 2 | | Ground Floor | Accessories Store | Working | (20%-60%) | 56 | $\sqrt{}$ |
| 3 | Building No-01 | 1st Floor | Finished Goods Store | Working | (20%-60%) | 54 | $\sqrt{}$ |
| 4 | | 2nd Floor | Wastage Store | Working | (20%-60%) | 57 | |
| 5 | | 2nd Floor | prayer Room | Working | (20%-60%) | 56 | V |
| 6 | | Ground Floor | Sizing & Weaving | Working | (20%-60%) | 53 | V |
| 7 | | | Cutting Section | Working | (20%-60%) | 56 | 1 |
| 8 | | | Feeding Section | Working | (20%-60%) | 56 | |
| 9 | Duilding no 02 | | Stitching Section | Working | (20%-60%) | 57 | |
| 10 | Building no-02 | 1st Floor | Fabrics Inspection | Working | (20%-60%) | 57 | |
| 11 | | | Fabrics Folding | Working | (20%-60%) | 53 | |
| 12 | | | Packing Section | Working | (20%-60%) | 54 | $\sqrt{}$ |
| 13 | | | Metal Free Zone | Working | (20%-60%) | 53 | |
| 14 | | Ground Floor | Medical Center | Working | (20%-60%) | 55 | |
| 15 | Building No-03 | 1 . 171 | Child Care | Working | (20%-60%) | 54 | √ |
| 16 | | 1st Floor | Fire Control Room | Working | (20%-60%) | 52 | |
| 17 | | | Warping Section-01 | Working | (20%-60%) | 51 | |
| 18 | D 1111 N 04 | Ground Floor | Warping Section-02 | Working | (20%-60%) | 52 | |
| 19 | Building No-04 | | Twisting & Doubling | Working | (20%-60%) | 57 | |
| 20 | | 1st Floor | Finishing Folding Section | Working | (20%-60%) | 47 | |
| 21 | | Ground Floor | Sub-Station | Working | (20%-60%) | 58 | |
| 22 | Building-05 | 1.4 121 | Office Room | Working | (20%-60%) | 55 | |
| 23 | | 1st Floor | Technical Room | Working | (20%-60%) | 51 | |
| 24 | | | Bleaching | Working | (20%-60%) | 55 | $\sqrt{}$ |
| 25 | | | Dyeing | Working | (20%-60%) | 58 | |
| 26 | | | Mercerizing | Working | (20%-60%) | 55 | |
| 27 | Building-06 | Ground Floor | Dyeing Finishing | Working | (20%-60%) | 53 | |
| 28 | | | Chemical Sub Store | Working | (20%-60%) | 51 | |
| 29 | | | Printing Section | Working | (20%-60%) | 55 | |
| 30 | | | ETP | Working | (20%-60%) | 54 | |
| 31 | | Count Floor | Chemical Store | Working | (20%-60%) | 56 | |
| 32 | | Ground Floor | Work-Shop | Working | (20%-60%) | 56 | |
| 33 | Building-07 | 1 of Elean | General Store | Working | (20%-60%) | 58 | |
| 34 | | 1st Floor | Officer's Dining | Working | (20%-60%) | 57 | |
| 35 | | 2nd Floor | Worker's Canteen | Working | (20%-60%) | 55 | |
| 36 | Duilding 10 | Ground Floor | Washing Area | Working | (20%-60%) | 56 | $\sqrt{}$ |
| 37 | Building-10 | Ground Floor | Dryer Machine | Working | (20%-60%) | 55 | |
| 38 | | Ground Floor | Chemical Store | Working | (20%-60%) | 53 | |
| 39 | Building-11 | Orouna rioof | Quilting Machine | Working | (20%-60%) | 52 | |
| 40 | Dunung-11 | 1st Floor | 1st Floor Fabric Store Working | | (20%-60%) | 56 | |
| 41 | | 2nd Floor | Mending | Working | (20%-60%) | 56 | |
| 42 | | | Weaving Section | Working | (20%-60%) | 55 | |
| 43 | Building-12 | Ground Floor | Sizing Section | Working | (20%-60%) | 58 | |
| 44 | | | Warping Section-02 | Working | (20%-60%) | 58 | √ |





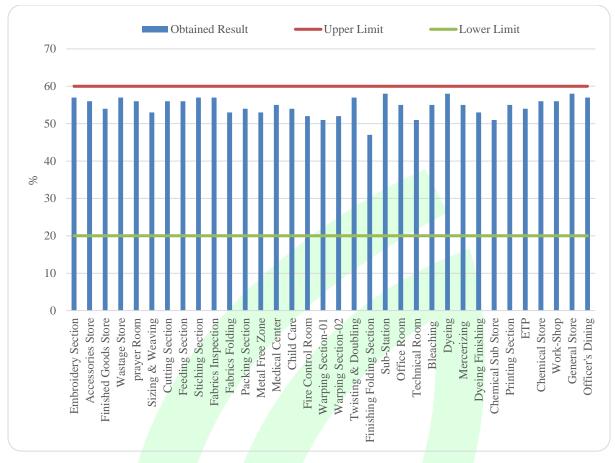


| | | Inspecti | on Area | | Inspection | Inspection Status | | | |
|--------|-------------|--------------|--------------------------------|-----------|-----------------------------|-------------------|--------------|--|--|
| Sl. No | Building No | Floor/Level | Section | Condition | Comparative Standard (%) | Obtained Result | Within Limit | | |
| 45 | | Ground Floor | Stenter Machine | Working | (20%-60%) | 48 | V | | |
| 46 | Duilding 10 | Ground Floor | Rasing Section | Working | (20%-60%) | 57 | V | | |
| 47 | Building-12 | 1st Floor | Quilting Section | Working | (20%-60%) | 55 | V | | |
| 48 | | 18t F100f | Cutting Section | Working | (20%-60%) | 54 | | | |
| 49 | | | Feeding Section | Working | (20%-60%) | 56 | | | |
| 50 | | | Stitching Section | Working | (20%-60%) | 58 | | | |
| 51 | | | Fabrics Inspection | Working | (20%-60%) | 57 | $\sqrt{}$ | | |
| 52 | Building-12 | 1st Floor | Fabrics Folding Section | Working | (20%-60%) | 55 | | | |
| 53 | | | Packing Section | Working | (20%-60%) | 57 | | | |
| 54 | | | Metal Free Zone | Working | (20%-60%) | 55 | | | |
| 55 | | | Finished Goods Store | Working | (20%-60%) | 53 | $\sqrt{}$ | | |
| 56 | Building-13 | Ground Floor | Office Area | Working | (20%-60%) | 56 | V | | |
| 57 | | Ground Floor | Digital Printing | Working | (20%-60%) | 55 | V | | |
| 58 | Building-14 | 1st Floor | Tufting | Working | (20%-60%) | 58 | $\sqrt{}$ | | |
| 59 | | 2nd Floor | Tufting | Working | (20%-60%) | 58 | $\sqrt{}$ | | |
| 60 | | | Admin & Compliance | Working | (20%-60%) | 48 | $\sqrt{}$ | | |
| 61 | | Ground Floor | Accounts & Finance | Working | (20%-60%) | 59 | $\sqrt{}$ | | |
| 62 | | | Commercial | Working | (20%-60%) | 55 | | | |
| 63 | | | Show Room | Working | (20%-60%) | 54 | $\sqrt{}$ | | |
| 64 | Building-15 | 1st Floor | Display Center | Working | (20%-60%) | 54 | V | | |
| 65 | | 131 1 1001 | Marketing | Working | (20%-60%) | 57 | $\sqrt{}$ | | |
| 66 | | | Commercial | Working | (20%-60%) | 57 | V | | |
| 67 | | 2nd Floor | Sample Room | Working | (20%-60%) | 55 | $\sqrt{}$ | | |
| 68 | | 2110 1 1001 | IT Room | Working | (20%-60%) | 57 | $\sqrt{}$ | | |

^{**}Abbreviations and Acronyms: RH= Relative Humdity







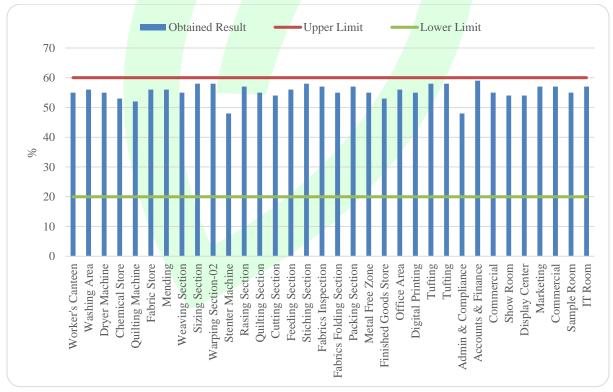


Figure: Humidity level in the working area





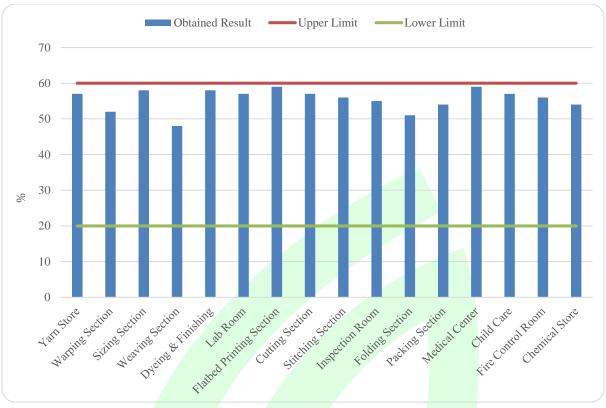
Indoor Humidity Level Inspection Result: (ACS Towel Limited)

| | | Insp | ection Area | | Inspection | n Status | S |
|--------|----------------|--------------|----------------------------------|-----------|-----------------------------|-----------------|--------------|
| SI. No | Building No | Floor/Level | Section | Condition | Comparative Standard (%) | Obtained Result | Within Limit |
| 1 | | Basement | Yarn Store | Working | (20%-60%) | 57 | |
| 2 | | | Warping Section | Working | (20%-60%) | 52 | |
| 3 | | | Sizing Section | Working | (20%-60%) | 58 | |
| 4 | | Ground Floor | Weaving Section | Working | (20%-60%) | 48 | |
| 5 | | Ground Floor | Dyeing & Finishing | Working | (20%-60%) | 58 | |
| 6 | Building-1 | | Lab Room | Working | (20%-60%) | 57 | |
| 7 | Building-1 | | Flatbed Printing Section | Working | (20%-60%) | 59 | $\sqrt{}$ |
| 8 | | | Cutting Section | Working | (20%-60%) | 57 | $\sqrt{}$ |
| 9 | | | Stitching Section | Working | (20%-60%) | 56 | |
| 10 | | 1st Floor | Inspection Room | Working | (20%-60%) | 55 | |
| 11 | | | Folding Section | Working | (20%-60%) | 51 | |
| 12 | | | Packing Section | Working | (20%-60%) | 54 | |
| 13 | | Ground Floor | Medical Center | Working | (20%-60%) | 59 | |
| 14 | Building-2 | 1st Floor | Child Care | Working | (20%-60%) | 57 | $\sqrt{}$ |
| 15 | | 18t F1001 | Fire Control Room | Working | (20%-60%) | 56 | $\sqrt{}$ |
| 16 | | Ground Floor | Chemical Store | Working | (20%-60%) | 54 | |
| 17 | Building-3 | Ground Floor | Work Shop | Working | (20%-60%) | 56 | |
| 18 | | 1st Floor | General Store | Working | (20%-60%) | 57 | $\sqrt{}$ |
| 19 | Building-3 | 1st Floor | Officer's Dining | Working | (20%-60%) | 53 | |
| 20 | Dunuing-3 | 2nd Floor | Worker's Dining | Working | (20%-60%) | 54 | $\sqrt{}$ |
| 21 | | | Compressor | Working | (20%-60%) | 57 | $\sqrt{}$ |
| 22 | Building-4 | Ground Floor | Generator Room | Working | (20%-60%) | 55 | |
| 23 | Building-4 | Ground Floor | Boiler Room | Working | (20%-60%) | 53 | $\sqrt{}$ |
| 24 | | | Technical Director Office | Working | (20%-60%) | 55 | $\sqrt{}$ |
| 25 | | Ground Floor | Chemical Store | Working | (20%-60%) | 53 | |
| 26 | Building-5 | | Quilting Machine Room | Working | (20%-60%) | 54 | |
| 27 | Dunanig-3 | 1st Floor | Fabric Store | Working | (20%-60%) | 58 | |
| 28 | | 2nd Floor | Mending Area | Working | (20%-60%) | 57 | $\sqrt{}$ |
| 29 | Building-6 | Ground Floor | ETP | Working | (20%-60%) | 55 | $\sqrt{}$ |
| 30 | Building-7 | Ground Floor | Security Post | Working | (20%-60%) | 59 | $\sqrt{}$ |
| 31 | Building-8 | Ground Floor | Electrical Sub-Station | Working | (20%-60%) | 60 | |
| 32 | | ed-01 | Wastage Area Working | | (20%-60%) | 60 | $\sqrt{}$ |
| 33 | She | ed-02 | Wastage Area | Working | (20%-60%) | 59 | $\sqrt{}$ |

^{**}Abbreviations and Acronyms: RH= Relative Humdity







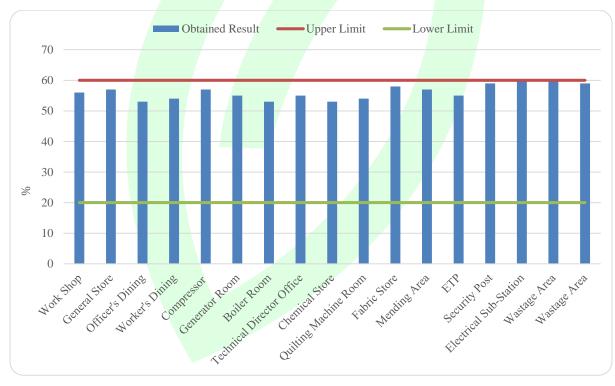


Figure: Humidity level in the working area







Discussion and Recommendation:

There is no "ideal" humidity and Temperature condition. The normal levels of relative humidity and temperature for indoor air will vary widely from region (climate) to region (climate). Individuals can also vary widely as to what they find acceptable. The OSHA and ASHRAE guidelines recommend a range of 20°C to 35°C and a relative humidity (RH) of 20 to 60 percent. GREENBUD Testing & Inspection Services Private Limited has tested Temperature and Humidity for all the production sections of **ACS Textiles (Bangladesh) Ltd.** & **ACS Towel Limited.** During inspection, temperature and humidity in all sections found within the limit.

The following recommendations are suggested to reduce any farther adverse effect:

- ✓ Automation and mechanization of tasks minimize the need for heavy physical work and the resulting buildup of body heat.
- ✓ Covering hot surfaces with sheets of low emissivity material such as aluminum or paint that reduces the amount of heat radiated from this hot surface into the workplace.
- ✓ Insulation reduces the heat exchange between the source of heat and the work environment.
- ✓ Ventilation, localized air conditioning is commonly used to provide cool workstations.
- ✓ Passive ventilation by opening windows for cross ventilation
- ✓ Remove moisture at the source, for example, use an extract fan in the high humid area, using a range hood in the kitchen, venting a dryer to the outside and using only externally vented gas heaters.
- ✓ Regular temperature and humidity monitoring.

The factory is suggested to assess the temperature and humidity level once annually at least if all other setups are constant.

Engr. Sved Tashem Mahmood

CEO and Chief Environmental Engineer

GREENBUD

MIEB No.: M/35960

ISO 14001 certification Number.: EA/15/IN/16050 ISO 50001 certification Number.: ENMS/16/IN/533







APPENDIX



Figure: Indoor Temperature and Humidity Monitoring







Instrument Description:

Humidity affects stress on materials and products to a degree that can be calculated. The data generated by humidity testing can be important in planning materials selection, paints, and coatings, and expected a lifetime of a product. High and low humidity can be simulated in a number of testing chambers and machines. GREENBUD Testing & Inspection Services Private Ltd. FY 866 Digital Hydro-Thermometer to measure Indoor & Ambient Temperature & Humidity level. The digital Humidity & Temperature Meter & Wet Bulb Temperature Dew Point temperature has been designed to combine the functions of Humidity Meter, Temperature Meter, Wet Bulb Temperature and Dew point temperature. It is an ideal Humidity & Temperature Meter Instrument with scores of practical applications for laboratorial, industrial, Engineer and professional use. The Humidity & Temperature Meter is for use a humidity & temperature semiconductor sensor.



Technical Specification:

| Response Time | %RH:10S (90% at +25°C still air) | | | | |
|-----------------------|---|--|--|--|--|
| Accuracy | Ambient Temperature range: 64 to 82°F (18 to 28°C) | | | | |
| Sampling Rate | 2.5 samples per second | | | | |
| Operating Conditions | 32 to 104°F (0 to 40°C); < 80% RH non-condensing | | | | |
| Humidity Accuracy | + 2%RH (at 25°C, 20% ~80% RH). + 2.5%RH (at other ranges) | | | | |
| Humidity | 0%~100%RH | | | | |
| Resolution | 0.01% RH, 0.01°C /°F. | | | | |
| Dew Point Temperature | (-30°C ~100°C /-22°F~199°F) | | | | |
| Wet Bulb Temperature | (0°C~80°C /32°F~176°F) | | | | |









CERTIFICATE OF CALIBRATION



Certificate Number: AC-3052

Issued by: Calibration Technology Pvt. Limited.

Address: Vivek Biponon Tower, Level-2, 13/P, Biponon C/A, Mymensing Lane, Dhaka-1000, Bangladesh.

Tel: +8809643220000, E-mail: info@caltechbd.com, Visit us at: www.caltechbd.com





Accredited to ISO 9001:2015 & ISO/IEC 17025:2017

Calibration Performed For:

GREENBUD

F14A,L14, Confidence Center(Building 2),Kha-09, Shajadpur, Gulshan, Dhaka, Bangladesh

Phone

:+880 1711084732

Mail Address Contact Person : jesan@greenbudbd.com : SYEED JESAN MAHMOOD

Calibration Statics:

Rreceived on :06 Dec 2023 **Date Serviced** : 07 Dec 2023 Due on : 06 Dec 2024

Issued on :07 Dec 2023 Received Condition : Good

Returned Condition : Good Interval :12 Months Performed By : Md. Mahin Saruar Suton

Performed At Environmental

: Caltech Laboratory : Temp 25.1°C & RH 56.7%

Conditions CalTech Procedure : CTPL-WI-51 Certificate No. CTPL(23-24)-6182

Equipment Details:

Description

: Digital Thermo Hygrometer

Manufacturer

: FUYI : FY866

Model No. Serial No.

:6F221604006P : GB-140-021-002

Asset /ID No **Working Range**

: Temp.(-10 to 50)°C & Hum.(20 to 99)%

Readability : 0.1°C for Temp. & 1% for RH.

Comments/Notes

Declaration of result as per ILAC-G8:2019 (Binary).

The result of calibration is satisfactory.

Any section marked. N/P= Not Provided.

N/S= Not Submitted,

UUC= Unit Under Calibration. Tolerance is taken from manufacturer specification.

CalTech hereby certifies that...

The above described instrument met or exceeded all established specifications at the time of calibration specified above; and the calibration results published in this certificate obtained using equipment capable of producing results that are traceble through NIST to the International System of Units (SI) or have been derived from accepted values, physical constants, by ratio or self calibration techniques. All Calibration activities performed are in compliance with ANSI/NCSL Z540-2-1997 and ISO 17025:2017 when specified as well as national/international system guidelines. The quality system is ISO 9001:2015 certified. This report shall not be reproduced, except in full, without the written

All Calibrations, unless otherwise noted, are performed using accuracies of less than or equal to one quarter of the specification of the unit under calibration. The measurement uncertainties include a coverage factor of K=2, having a confidence level of 95%.

Calibration Points

Result Column: P= Pass, F= Fail, A= Adjusted, D= No Result drawn due to tolerance N/S

| | Dew Point Temp | erature | | | | | | |
|---------|----------------|--------------|---------------------------------|----------|------------|-----------------------|--------|-----------------|
| Sl. No. | Description | Nominal (°C) | As found (Corrected) (°C) | uuc (°c) | Error (°C) | Tolerance (±) (°C) | Result | Uncertainty (±) |
| 01 | Temperature | -20 | -19.9 | -20.0 | -0.1 | 1.5 | P | 0.3 |
| 02 | Temperature | 20 | 19.9 | 20.0 | 0.1 | 1 | D | 0.3 |
| 03 | Temperature | 30 | 30.0 | 30.0 | 0.0 | 1 | D | 0.3 |
| 04 | Temperature | 40 | 39.9 | 40.0 | 0.1 | 1 | D | 0.3 |
| 05 | Temperature | 50 | 49.8 | 50.0 | 0.2 | 1.5 | P | 0.3 |









TIFICATE OF CALIBRATION











Tel: +8809643220000, E-mail: info@caltechbd.com, Visit us at: www.caltechbd.com Accredited to ISO 9001:2015 & ISO/IEC 17025:2017

> Certificate No. CTPL(23-24)-6182

| NO. | SSAN CONTRACTOR | DATE OF THE PARTY | | | | |
|-----|-----------------|---|----|-----|-----|------|
| | | | - | | | |
| | Wet | Bulb | Te | mne | rat | IIFO |

Issued by: Calibration Technology Pvt. Limited.Address: Vivek Biponon Tower, Level-2, 13/P, Biponon C/A, Mymensing Lane, Dhaka-1000, Bangladesh.

| SI. No. | Description | Nominal (°C) | As found (Corrected) (°C) | UUC (°C) | Error (°C) | Tolerance (±) (°C) | Result | Uncertainty (±) |
|---------|-------------|--------------|---------------------------------|----------|------------|-----------------------|--------|-----------------|
| 01 | Temperature | -10 | -9.9 | -10.0 | | | | 325 20 |
| 02 | Temperature | 20 | | | -0.1 | 1.5 | P | 0.3 |
| 03 | Temperature | | 19.9 | 20.0 | 0.1 | 1 | Р | 0.3 |
| | | 30 | 30.0 | 30.0 | 0.0 | 1 | D | |
| 04 | Temperature | 40 | 40.1 | 40.0 | | 1 | Р | 0.3 |
| 05 | Temperature | | | | -0.1 | 1 | P | 0.3 |
| | remperature | 50 | 50.2 | 50.0 | -0.2 | 1.5 | Р | 0.3 |

| SI. No. | | Nominal (%) | As found (Corrected) (%) | | Error (%) | Tolerance (±) (%) | Result | Uncertainty (±) (%) |
|---------|--------------------|-------------|--------------------------------|------|-----------|-------------------|--------|--------------------------------------|
| 01 | Humidity at 25(°C) | 20 | 20.1 | 20.0 | 0.1 | | | A STATE OF THE STATE OF THE STATE OF |
| 02 | Humidity at 25(°C) | 30 | 29.8 | | -0.1 | 3 | P | 0.9 |
| 03 | Humidity at 25(°C) | | | 30.0 | 0.2 | 3 | P | 0.9 |
| 04 | | 40 | 40.4 | 40.0 | -0.4 | 3 | D | |
| | Humidity at 25(°C) | 50 | 48.6 | 50.0 | 1.4 | - | г | 0.9 |
| 05 | Humidity at 25(°C) | 70 | | | 1.4 | 5 | P | 0.9 |
| -14-4-5 | , 4125(C) | 70 | 67.5 | 70.0 | 2.5 | 5 | Р | 0.9 |

Standard Used to Calibrate Equipment

| SI. No. | Description | Manufacturer | Model | Serial | Calibrated | |
|---------|----------------|--|-------|---|------------|-------------|
| 01 | Humidity Meter | TEARER Tech | 201 | TOTAL SECTION OF THE | from | Cal. Due on |
| | ALCOHOL: | - The state of the | 201 | 202112232 QSI | | 24 Mar 2024 |

Calibration Performed By : Calibration Engineer

[END]

Authorized By: Laboratory Manager Md. Reza Hossain







ACCREDITATION CERTIFICATE

Issued under the authority of Bangladesh Accreditation Act, 2006 by Bangladesh Accreditation Board (BAB), Ministry of Industries to

GREENBUD Testing & Inspection Services 14A, Level-14, Building 2, Confidence center Kha-09, Sahajadpur, Gulshan, Dhaka-1212, Bangladesh

This is to certify that this

Inspection Body(Type-A)

is accredited in accordance with the international standard

ISO/IEC 17020:2012

in respect of the associated scope, subject to the terms and conditions governing the relevant conformity assessment body (CAB) accreditation.

Certificate Number

: 05.003.18

Accreditation Date

: 28 June 2018

Date of Issuance

: 18 Aug 2024 (2nd Renewal)

Date of Expiration : 27 June 2027





8. 08.2024 Md. Anwarul Alam **Director General**

This certificate must be returned on request; reproduction must follow BAB guidelines. For the specific scopes to which this accreditation applies, please refer to the Directory of CABs at BAB website.