

# شهادة اعتماد

رقم TL 222



يقر نظام الاعتماد العراقي بأن:  
مختبرات شركة مسار الخبراء للتجارة والمقاولات العامة والخدمات العامة  
والنقل العام والتجهيزات الغذائية وخدمات التنظيف والفحص والتقييم  
والسيطرة النوعية والتعبئة والتغليف محدودة المسؤولية  
العراق - ديالى - منفذ المنذرية الحدودي

تم اعتمادها وفقا لمتطلبات المواصفة ISO/ IEC 17025:2017  
(المتطلبات العامة لاهلية مختبرات الفحص والمعايرة)  
في مجال:

- اختبارات المواد الانشائية
- اختبارات المواد المعدنية
- اختبارات المواد البلاستيكية
- اختبارات المواد الكيميائية
- اختبارات الاجهزة والمعدات الكهربائية والإلكترونية

شرط التوافق مع متطلبات المواصفة اعلاه ومتطلبات IQAS الخاصة بالاعتماد  
مجال الاعتماد المرفق بالشهادة يعتبر جزءا لا يتجزأ منها  
يمكن الحصول على الاصدار الاحداث من مجال الاعتماد من خلال الموقع الالكتروني  
<https://iqas.mop.gov.iq>

يكون الاعتماد نافذا من 2025/5/27 الى 2027/5/26  
تاريخ منح الاعتماد لأول مرة  
2025/5/27

أ.د. محمد علي تميم  
نائب رئيس مجلس الوزراء  
وزير التخطيط

المهندس  
عبد الواحد محمد ابراهيم  
مدير عام الهيئة/ وكالة

## ACCREDITATION CERTIFICATE

No. TL 222



Iraqi Accreditation System Certify that:  
**Laboratories of Masar Al-Khubra Company for Trade, General Contracting, Public Services, Public Transport, Food Equipment, Cleaning Services, Inspection, Standardization, Quality Control, Packaging and Packaging Limited Liability**  
Iraq – Diyala - Al-Munzeriya Border Port

Is accredited according to the requirements of the standard ISO/IEC 17025:2017  
(General Requirements for the Competence of Testing and Calibration Laboratories)

In the field of:

- Construction Materials Testing - Metallurgical Materials Testing
- Chemical Materials Testing - Polymer Materials Testing
- Electrical & Electronic Devices Testing

This accreditation is subject to with the above standard & IQAS requirements  
The scope of accreditation is attached to the certificate & considered as part of it  
The most recent issue of the accreditation scope is available on IQAS website

<https://iqas.mop.gov.iq>

Accreditation is valid From 27/5/2025 To 26/5/2027

Initial accreditation date  
27/5/2025

Eng. Abdul Wahid M. Ibrahim  
Director General of IQAS

Dr. Mohammed Ali Tamim  
Deputy Prime Minister  
Minister of Planning

|                                                                                                                                                                |                                                                                                                                                                                                                                                                                      |                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
|                                                                               | <p style="text-align: center;">استمارة<br/>مجال الاعتماد<br/><b>Scope of Accreditation<br/>form</b></p>                                                                                                                                                                              | <p style="text-align: center;">نظام الاعتماد العراقي<br/><b>IQAS</b></p> |
| <b>Organization address:</b><br>Iraq – Diyala - Al-Munzeriya<br>Border Port                                                                                    | <b>Organization name:</b><br>Laboratories of Masar Al-Khubra<br>Company for Trade, General<br>Contracting, Public Services, Public<br>Transport, Food Equipment, Cleaning<br>Services, Inspection, Standardization,<br>Quality Control, Packaging and<br>Packaging Limited Liability | <b>Accreditation no.:</b><br>TL 222                                      |
| <b>Signature:</b> <br>Eng. Abdul Wahid M. Ibrahim<br>Director General of IQAS | <b>Accreditation is valid:</b><br>From 27/5/2025 To 26/5/2027                                                                                                                                                                                                                        | <b>Issue no.:</b><br>001                                                 |

| Testing field         | Type of test                                                                                                       | Test object or product                                   | Reference to standardize method |
|-----------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|---------------------------------|
| Mechanical & Physical | Tensile test and bending                                                                                           | Glass fiber concrete rein or cement bars                 | GSO 2488/2015                   |
| Mechanical & Physical | Compressive strength test                                                                                          | Facing brick solid masonry units made from clay or shale | ASTM C216                       |
| Mechanical & Physical | Dimensions and tolerances<br>Flexion resistance                                                                    | Gypsum board                                             | IQS 1676                        |
| Mechanical & Physical | The examination is conducted according to the reference guide No.1042 for physical examination of building plaster | Gypsum for construction                                  | IQS 28                          |
| Mechanical & Physical | - Dimensions<br>- Disparity                                                                                        | Silica refractories for use in glass melting             | IQS 1749                        |
| Mechanical & Physical | - Dimensions<br>- Straightness<br>- Perpendicularity<br>- Congruence of panels                                     | Specification for fiber building boards                  | Standard specification 717      |
| Mechanical & Physical | Determination of density                                                                                           | Fiber building boards definition classification          | IQS 1749                        |
| Mechanical & Physical | Dimension variation distortion and cracks                                                                          | Silica refractories for use in glass melting furnaces    | IQS 1749                        |
| Mechanical & Physical | - Mass loss<br>- Determination of moisture content<br>- Straightness<br>- Dimensions<br>- Perpendicularity         | Fiber building boards                                    | IQS 717                         |
| Mechanical & Physical | Chips and cracks                                                                                                   | Silica refractories for use in glass melting furnaces    | IQS 1749                        |

|                                                                                                                                                                |                                                                                                                                                                                                                                                                                      |                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
|                                                                               | <p style="text-align: center;">استمارة<br/>مجال الاعتماد<br/><b>Scope of Accreditation<br/>form</b></p>                                                                                                                                                                              | <p style="text-align: center;">نظام الاعتماد العراقي<br/><b>IQAS</b></p> |
| <b>Organization address:</b><br>Iraq – Diyala - Al-Munzeriya<br>Border Port                                                                                    | <b>Organization name:</b><br>Laboratories of Masar Al-Khubra<br>Company for Trade, General<br>Contracting, Public Services, Public<br>Transport, Food Equipment, Cleaning<br>Services, Inspection, Standardization,<br>Quality Control, Packaging and<br>Packaging Limited Liability | <b>Accreditation no.:</b><br>TL 222                                      |
| <b>Signature:</b> <br>Eng. Abdul Wahid M. Ibrahim<br>Director General of IQAS | <b>Accreditation is valid:</b><br>From 27/5/2025 To 26/5/2027                                                                                                                                                                                                                        | <b>Issue no.:</b><br>001                                                 |

|                       |                                                                                                                          |                                                                                            |               |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------|
| Mechanical & Physical | Aggregate particles in microns                                                                                           | Determination of particle size and shape of aggregates                                     | IQS 30        |
| Mechanical & Physical | Flexor and compression                                                                                                   | Portend cement and Clinker.                                                                | IQS 5         |
| Mechanical & Physical | - Dimensions<br>- Fracture<br>- Tolerance<br>- Water absorption                                                          | terrazzo tiles with one layer for internal USE                                             | IQS 5038      |
| Mechanical & Physical | - Dimensions<br>- Absorption<br>- Compression<br>- Wild                                                                  | solid concrete interlocking paving units                                                   | IQS 1606      |
| Mechanical & Physical | - Appearance dimensions grain density                                                                                    | Filter sands and filter gravels for water purification filters                             | IQS:2000/1555 |
| Mechanical & Physical | - Determination of dissolved silica by mass method                                                                       | Alkali potential reactivity of coarse and fine aggregates used in concrete cardinal method | IQS 42        |
| Mechanical & Physical | Fine or Crosse aggregate                                                                                                 | Aggregate for concrete and building                                                        | IQS:45        |
| Mechanical & Physical | Determine the increase and decrease in abrasion or impact wear Fine or Crosse aggregate                                  | Materials for soil                                                                         | IQS:1693      |
| Mechanical & Physical | Effect of humidity change after water immersion<br>bending resistance<br>modvivi of elasticity<br>internal cross linking | standard solid panels                                                                      | IQS 548       |

|                                                                                        |                                                                                                                                                                                                                                                                                                    |                                             |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
|       | <p>استمارة<br/>مجال الاعتماد<br/>Scope of Accreditation<br/>form</p>                                                                                                                                                                                                                               | <p>نظام الاعتماد العراقي<br/>IQAS</p>       |
| <p><b>Organization address:</b><br/>Iraq – Diyala - Al-Munzeriya<br/>Border Port</p>   | <p><b>Organization name:</b><br/>Laboratories of Masar Al-Khubra<br/>Company for Trade, General<br/>Contracting, Public Services, Public<br/>Transport, Food Equipment, Cleaning<br/>Services, Inspection, Standardization,<br/>Quality Control, Packaging and<br/>Packaging Limited Liability</p> | <p><b>Accreditation no.:</b><br/>TL 222</p> |
| <p><b>Signatures:</b><br/>Eng. Abdul Wahid M. Ibrahim<br/>Director General of IQAS</p> | <p><b>Accreditation is valid:</b><br/>From 27/5/2025 To 26/5/2027</p>                                                                                                                                                                                                                              | <p><b>Issue no.:</b><br/>001</p>            |

|                          |                                                                                                                                                                                                                                                            |                                                                                   |                  |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------|
| Mechanical<br>& Physical | Water absorption<br>drought shrinkage<br>maximum drying shrinkage<br>pressure tolerance                                                                                                                                                                    | sand-lime<br>blocks and bricks                                                    | IQS 548          |
| Mechanical<br>& Physical | <ul style="list-style-type: none"> <li>- Soft point</li> <li>- Flash point</li> <li>- Permeability</li> <li>- Viscosity temperature</li> </ul>                                                                                                             | asphalt used in roofing                                                           | IQS 1196         |
| Mechanical<br>& Physical | <ul style="list-style-type: none"> <li>- Residual after evaporation</li> <li>- Non-volatile materials</li> <li>- Water ratio</li> <li>- Drought</li> <li>- Heat</li> <li>- Plasticity</li> <li>- Water resistance</li> <li>- Direct flame check</li> </ul> | emulsified<br>asphalt used as<br>protective<br>coating for roofing                | IQS 1173         |
| Mechanical<br>& Physical | <ul style="list-style-type: none"> <li>- Nominal size</li> <li>- flow rate</li> <li>- final connections</li> </ul>                                                                                                                                         | building valves                                                                   | IQS 5008/2017    |
| Mechanical<br>& Physical | <ul style="list-style-type: none"> <li>- Permeability</li> <li>- softening point</li> <li>- liquidity</li> <li>- correlation</li> <li>- asphalt compatibility</li> </ul>                                                                                   | joint and crack<br>sealants ,hot applied for<br>concrete and asphalt<br>pavements | IQS 1110/2016    |
| Mechanical<br>& Physical | <ul style="list-style-type: none"> <li>- Dimensions</li> <li>- absorption</li> <li>- tolerance</li> <li>- compressive strength</li> </ul>                                                                                                                  | clay building bricks                                                              | IQS 24<br>IQS 25 |
| Mechanical<br>& Physical | <ul style="list-style-type: none"> <li>- Penetration</li> <li>- Liquidity</li> <li>- correlation</li> </ul>                                                                                                                                                | concrete joint sealer ,<br>cold application type                                  | IQS 1288/1988    |

|                                                                                   |                                                                                                                                                                                                                                                                                      |                                                                          |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
|  | <p style="text-align: center;">استمارة<br/>مجال الاعتماد<br/><b>Scope of Accreditation<br/>form</b></p>                                                                                                                                                                              | <p style="text-align: center;">نظام الاعتماد العراقي<br/><b>IQAS</b></p> |
| <b>Organization address:</b><br>Iraq – Diyala - Al-Munzeriya<br>Border Port       | <b>Organization name:</b><br>Laboratories of Masar Al-Khubra<br>Company for Trade, General<br>Contracting, Public Services, Public<br>Transport, Food Equipment, Cleaning<br>Services, Inspection, Standardization,<br>Quality Control, Packaging and<br>Packaging Limited Liability | <b>Accreditation no.:</b><br>TL 222                                      |
| <b>Signature:</b><br>Eng. Abdul Wahid M. Ibrahim<br>Director General of IQAS      | <b>Accreditation is valid:</b><br>From 27/5/2025 To 26/5/2027                                                                                                                                                                                                                        | <b>Issue no.:</b><br>001                                                 |

|                       |                                                                                                                                                                       |                                                                                          |                                               |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------|
| Mechanical & Physical | <ul style="list-style-type: none"> <li>- Viscosity</li> <li>- distillation</li> <li>- permeability penetration</li> <li>- liquidity</li> <li>- correlation</li> </ul> | asphalt primer                                                                           | IQS 1195/2015                                 |
| Chemical              | L.O.I                                                                                                                                                                 | Cement and Gypsum                                                                        | IQS 472+A5<br>IQS 273                         |
| Physical              | Setting time by Vicat                                                                                                                                                 | Cement                                                                                   | IQS 198+A3                                    |
| Mechanical            | Flexural strength                                                                                                                                                     | Cement and Gypsum                                                                        | IQS 198+A3,<br>IQS 273                        |
| Mechanical            | Compressive strength                                                                                                                                                  | Cement, Gypsum,                                                                          | IQS 198+A3 IQS1042                            |
| Physical              | Dimensions                                                                                                                                                            | Stones and Cellular Concrete Blocks [thermstone], Clay building brick, Clay facing brick | IQS 65/3<br>IQS 810:09<br>IQS 24<br>ASTM C 67 |
| Mechanical            | Soundness by Le Chatelier                                                                                                                                             | Cement                                                                                   | IQS 198+A3                                    |
| Chemical              | Free Water                                                                                                                                                            | Gypsum                                                                                   | IQS 273                                       |
| Chemical              | Combined Water                                                                                                                                                        | Gypsum                                                                                   | IQS 273                                       |
| Physical              | Fineness                                                                                                                                                              | Gypsum                                                                                   | IQS 28<br>IQS 1042                            |
| Physical              | Setting Time                                                                                                                                                          | Gypsum                                                                                   | IQS 28<br>IQS 1042                            |
| Physical              | Module of rupture                                                                                                                                                     | Gypsum                                                                                   | IQS 28<br>IQS 1042                            |
| Mechanical            | Dimension & Shape                                                                                                                                                     | Terrazzo Tiles                                                                           | IQS 31                                        |
| Mechanical            | Total Water Absorption                                                                                                                                                | Terrazzo Tiles                                                                           | IQS 31                                        |
| Mechanical            | Water Absorption by tile-face                                                                                                                                         | Terrazzo Tiles                                                                           | IQS 31                                        |

|                                                                                   |                                                                                                                                                                                                                                                                                      |                                                                          |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
|  | <p style="text-align: center;">استمارة<br/>مجال الاعتماد<br/><b>Scope of Accreditation<br/>form</b></p>                                                                                                                                                                              | <p style="text-align: center;">نظام الاعتماد العراقي<br/><b>IQAS</b></p> |
| <b>Organization address:</b><br>Iraq – Diyala - Al-Munzeriya<br>Border Port       | <b>Organization name:</b><br>Laboratories of Masar Al-Khubra<br>Company for Trade, General<br>Contracting, Public Services, Public<br>Transport, Food Equipment, Cleaning<br>Services, Inspection, Standardization,<br>Quality Control, Packaging and<br>Packaging Limited Liability | <b>Accreditation no.:</b><br>TL 222                                      |
| <b>Signature:</b><br>Eng. Abdul Wahid M. Ibrahim<br>Director General of IQAS      | <b>Accreditation is valid:</b><br>From 27/5/2025 To 26/5/2027                                                                                                                                                                                                                        | <b>Issue no.:</b><br>001                                                 |

|            |                                                                                                                                   |                                                                                                 |                                                           |
|------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Mechanical | Transverse Strength                                                                                                               | Terrazzo Tiles                                                                                  | IQS 31                                                    |
| Mechanical | Water Absorption                                                                                                                  | Ceramic tiles and Cellular Concrete Blocks [thermstone], Clay building brick, Clay facing brick | ISO 10545-3:2019, IQS 810:09, IQS 24:1988, ASTM C 67:2021 |
| Mechanical | Dimension & surface quality                                                                                                       | Ceramic tiles                                                                                   | ISO 10545- 2:2018                                         |
| Mechanical | Breaking Strength                                                                                                                 | Ceramic tiles                                                                                   | ISO 10545- 4:2019                                         |
| Mechanical | Modulus of Rupture                                                                                                                | Ceramic tiles and Dimension Stones                                                              | ISO 10545- 4:2019                                         |
| Mechanical | Water absorption & bulk density                                                                                                   | Dimension Stones                                                                                | IQS 1387:2017                                             |
| Mechanical | Standard test method for quantitative determination of phases in Portland cement clinker by microscopically point-count procedure | Portland Cement Clinker                                                                         | ASTM C1356-07                                             |
| Mechanical | Strength test [with & across fiber grain]                                                                                         | Bitumen felt waterproofing[isogram]                                                             | IQS 4+A1:2013                                             |
| Mechanical | Loss on heating                                                                                                                   | Bitumen felt waterproofing[isogram]                                                             | IQS 4+A1:2013                                             |
| Mechanical | Thermal stability                                                                                                                 | Bitumen felt waterproofing[isogram]                                                             | IQS 4+A1:2013                                             |
| Mechanical | Dimension tolerance                                                                                                               | Cellular Concrete Blocks[thermstone]                                                            | IQS 810:09                                                |
| Mechanical | Dry bulk density                                                                                                                  | Cellular Concrete Blocks [thermstone]                                                           | IQS 810:09                                                |
| Mechanical | Initial tensile adhesion strength test                                                                                            | Cementations Adhesives                                                                          | ISO 13007-2:2013<br>EN 12004-2:2017                       |
| Mechanical | Tensile adhesion strength after water immersion                                                                                   | Cementations Adhesives                                                                          | ISO 13007-2:2013<br>EN 12004-2:2017                       |

|                                                                                                                                                                   |                                                                                                                                                                                                                                                                                      |                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
|                                                                                  | <p style="text-align: center;">استمارة<br/>مجال الاعتماد<br/><b>Scope of Accreditation<br/>form</b></p>                                                                                                                                                                              | <p style="text-align: center;">نظام الاعتماد العراقي<br/><b>IQAS</b></p> |
| <b>Organization address:</b><br>Iraq – Diyala - Al-Munzeriya<br>Border Port                                                                                       | <b>Organization name:</b><br>Laboratories of Masar Al-Khubra<br>Company for Trade, General<br>Contracting, Public Services, Public<br>Transport, Food Equipment, Cleaning<br>Services, Inspection, Standardization,<br>Quality Control, Packaging and<br>Packaging Limited Liability | <b>Accreditation no.:</b><br>TL 222                                      |
| <b>Signature:</b><br><br>Eng. Abdul Wahid M. Ibrahim<br>Director General of IQAS | <b>Accreditation is valid:</b><br>From 27/5/2025 To 26/5/2027                                                                                                                                                                                                                        | <b>Issue no.:</b><br>001                                                 |

|                       |                                                                                             |                                                      |                                     |
|-----------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------------|
| Mechanical            | Tensile adhesion strength after heat aging                                                  | Cementations Adhesives                               | ISO 13007-2:2013<br>EN 12004-2:2017 |
| Mechanical            | Determination of slip                                                                       | Cementations Adhesives                               | ISO 13007-2:2013<br>EN 12004-2:2017 |
| Mechanical            | Extended open time                                                                          | Cementations Adhesives                               | ISO 13007-2:2013<br>EN 12004-2:2017 |
| Mechanical            | Flexural breaking                                                                           | Gypsum Board                                         | ASTM C 473:2019                     |
| Mechanical & Physical | Flexure and compression                                                                     | PRE-cast concrete kerbs and channels                 | IQS 5164/2022                       |
| Biological            | Detection and identification Pseudomonas aeruginosa.                                        | Cosmetics                                            | ISO 22717                           |
| Biological            | Enumeration and detection of aerobic mesophilic bacteria                                    | Cosmetics                                            | ISO 21149:2017                      |
| Mechanical & Physical | Check cheripple hot water check                                                             | silvered glass mirrors for general purposes          | IQS 1137/2020                       |
| Mechanical & Physical | Dimensions outer diameter and thickness                                                     | seamless steel tubes for heat exchangers             | IQS 1750/2022                       |
| Mechanical & Physical | - Abrasion resistance<br>- alkali resistance<br>- acid resistance<br>- hot water resistance | baths made from porcelain cast iron                  | IQS 1688/1991                       |
| Mechanical & Physical | Dimensions the parts are non-metallic membrane durability aging of the membrane material    | low pressure regulator for vales of LPG cylinders    | IQS 1287/1988                       |
| Mechanical & Physical | Stretch and elongate and bending                                                            | Iron test                                            | ASTM A370<br>ASTM A615              |
| Mechanical            | - Tensile strength<br>- Yield strength<br>- Elongation                                      | Ribbed carbon-steel bars for concrete reinforcements | ASTM A370<br>ASTM 615               |

|                                                                                                                                                                |                                                                                                                                                                                                                                                                                      |                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
|                                                                               | <p style="text-align: center;">استمارة<br/>مجال الاعتماد<br/><b>Scope of Accreditation<br/>form</b></p>                                                                                                                                                                              | <p style="text-align: center;">نظام الاعتماد العراقي<br/><b>IQAS</b></p> |
| <b>Organization address:</b><br>Iraq – Diyala - Al-Munzeriya<br>Border Port                                                                                    | <b>Organization name:</b><br>Laboratories of Masar Al-Khubra<br>Company for Trade, General<br>Contracting, Public Services, Public<br>Transport, Food Equipment, Cleaning<br>Services, Inspection, Standardization,<br>Quality Control, Packaging and<br>Packaging Limited Liability | <b>Accreditation no.:</b><br>TL 222                                      |
| <b>Signature:</b> <br>Eng. Abdul Wahid M. Ibrahim<br>Director General of IQAS | <b>Accreditation is valid:</b><br>From 27/5/2025 To 26/5/2027                                                                                                                                                                                                                        | <b>Issue no.:</b><br>001                                                 |

|            |                                                        |                                                                                                                                                                     |                                                                        |
|------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| Mechanical | - Tensile Strength<br>- Yield Strength<br>- Elongation | Ribbed Carbon-Steel<br>Bars for Concrete<br>Reinforcements                                                                                                          | ISO 6892-1/2019<br>ISO 15630-1/2019                                    |
| Mechanical | - Tensile Strength<br>- Yield Strength<br>- Elongation | Ribbed Carbon-Steel<br>Bars for Concrete<br>Reinforcements                                                                                                          | BS 4449/2016                                                           |
| Mechanical | Mass per unit length<br>tolerance                      | Steel Bars for concrete<br>reinforcement                                                                                                                            | ASTM E8M:2022,<br>BS 4449:2016                                         |
| Mechanical | - Tensile strength<br>- Yield strength<br>- Elongation | Steel Bars for concrete<br>reinforcement                                                                                                                            | ASTM A370<br>ASTM A615                                                 |
| Mechanical | - Bend Test<br>- Re-bend test                          | Steel Bars for concrete<br>reinforcement                                                                                                                            | ASTM E290:2022,<br>ISO 7438:2016,<br>ISO 7438:2016                     |
| Mechanical | Diameter tolerance                                     | Steel Bars for concrete<br>reinforcement                                                                                                                            | ISO 6892-1:2109                                                        |
| Mechanical | Tensile strength, Yield strength<br>after ageing       | Steel Bars for concrete<br>reinforcement                                                                                                                            | ISO 6892-1:2109,<br>ISO 6892-1:2019                                    |
| Mechanical | Elongation (after fracture, total<br>Eat max force)    | Steel Bars for concrete<br>Reinforcement                                                                                                                            | ISO 15630-1:2019,<br>ISO 15630-1:2019                                  |
| Physical   | Markings                                               | Steel Bars for concrete<br>reinforcement                                                                                                                            | ISO 6935:2019                                                          |
| Physical   | Geometrical Characteristics                            | PVC-U pipes within the<br>building structure<br>PVC-U pipes for non-<br>pressure underground<br>pipes Polyethylene (PE)<br>pipes for water supply<br>& for drainage | ISO 3126:2005, IQS<br>1512:2022, IQS<br>5037:2022, ISO 4427-<br>2:2019 |

|                                                                                   |                                                                                                                                                                                                                                                                                      |                                                                          |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
|  | <p style="text-align: center;">استمارة<br/>مجال الاعتماد<br/><b>Scope of Accreditation<br/>form</b></p>                                                                                                                                                                              | <p style="text-align: center;">نظام الاعتماد العراقي<br/><b>IQAS</b></p> |
| <b>Organization address:</b><br>Iraq – Diyala - Al-Munzeriya<br>Border Port       | <b>Organization name:</b><br>Laboratories of Masar Al-Khubra<br>Company for Trade, General<br>Contracting, Public Services, Public<br>Transport, Food Equipment, Cleaning<br>Services, Inspection, Standardization,<br>Quality Control, Packaging and<br>Packaging Limited Liability | <b>Accreditation no.:</b><br>TL 222                                      |
| <b>Signature:</b><br>Eng. Abdul Wahid M. Ibrahim<br>Director General of IQAS      | <b>Accreditation is valid:</b><br>From 27/5/2025 To 26/5/2027                                                                                                                                                                                                                        | <b>Issue no.:</b><br>001                                                 |

|                       |                                                                       |                                                                                                    |                                                         |
|-----------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Physical              | Impact resistance (round the clock method)                            | PVC-U pipes                                                                                        | EN ISO 3127:2017, IQS 1512:2022, IQS 5037:2022          |
| Physical              | Vicat softening temperature                                           | PVC-U pipes                                                                                        | EN ISO 2507-1:2017 IQS 1512:2022, IQS 5037:2022         |
| Physical              | Longitudinal reversion (air oven method)                              | PVC-U pipes & PE pipes                                                                             | EN ISO 2505:2005 IQS 1512:2022, IQS 5037:2022, ISO 2505 |
| Chemical              | Identification plastic type                                           | Plastic                                                                                            | ISO 11469                                               |
| Mechanical & Physical | - Dimensions<br>- resistance to stretching<br>- elongation            | PVC insulated and sheathed flat cables for fixed installations                                     | IQS:2313/ 2014                                          |
| Mechanical & Physical | - Thickness<br>- Bastard<br>- Electrical<br>- Mechanical<br>- Thermal | The rmoplastic insulated and rubber or the rmoplastic covered flat cables of rated voltage (400 v) | IQS:2200/ 2002                                          |
| Electrical            | - Determination of Voltage,<br>- Capacity<br>- Density                | Batteries                                                                                          | IEC 60095-1: 2018                                       |
| Electrical            | Conductor resistance test                                             | Electric cables with cross sectional area up to and including 10 mm <sup>2</sup>                   | Iraqi Guideline no. 1412:2023<br>IEC 63294:2021         |
| Electrical            | All test                                                              | Electrical household appliances                                                                    | TR ENG.81                                               |
| Electrical            | All test                                                              | Televisions                                                                                        | TR ENG.82                                               |
| Electrical            | All test                                                              | Plugs, Socket-outlets and Adapters                                                                 | TR ENG 78                                               |

|                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                    |                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
|                                                                                        | <p style="text-align: center;">استمارة<br/>مجال الاعتماد<br/><b>Scope of Accreditation<br/>form</b></p>                                                                                                                                                                                            | <p style="text-align: center;">نظام الاعتماد العراقي<br/><b>IQAS</b></p> |
| <p><b>Organization address:</b><br/>Iraq – Diyala - Al-Munzeriya<br/>Border Port</p>                                                                                    | <p><b>Organization name:</b><br/>Laboratories of Masar Al-Khubra<br/>Company for Trade, General<br/>Contracting, Public Services, Public<br/>Transport, Food Equipment, Cleaning<br/>Services, Inspection, Standardization,<br/>Quality Control, Packaging and<br/>Packaging Limited Liability</p> | <p><b>Accreditation no.:</b><br/>TL 222</p>                              |
| <p><b>Signature:</b> <br/>Eng. Abdul Wahid M. Ibrahim<br/>Director General of IQAS</p> | <p><b>Accreditation is valid:</b><br/>From 27/5/2025 To 26/5/2027</p>                                                                                                                                                                                                                              | <p><b>Issue no.:</b><br/>001</p>                                         |

|                       |                                                   |                                                               |            |
|-----------------------|---------------------------------------------------|---------------------------------------------------------------|------------|
| Electrical            | All test                                          | Household Electric circuit breakers and similar installations | TR ENG 138 |
| Electrical            | All test                                          | Dry primary batteries                                         | IQS 114    |
| Electrical            | All test                                          | Lead-acid starter batteries                                   | IQS 81     |
| Electrical            | All test                                          | Boxes and Enclosures for household and similar                | TR ENG 113 |
| Electrical            | All test                                          | Power cables for rated voltage 600/1000                       | TR ENG 11  |
| Electrical            | All test                                          | Power transformer                                             | IQS 5176   |
| Electronic            | All test                                          | safety requirements for IT equipment                          | TR ENG 146 |
| Mechanical & Physical | Trucks & bus tyers<br>Tyer design and load rating | Truck and bus tires                                           | IQS 2293   |