

TÜV Rheinland Proposal for

**New Mandatory Safety Standard for Clothing Storage
Furniture required by the STURDY Act.**

ASTM F2057-23

Dear Retailer,

On behalf of TÜV Rheinland Group, we would like to thank you for your time to review our enclosed proposal for the **new mandatory safety standard for clothing storage furniture required by the STURDY Act**.

In the morning of April 19th, 2023 the U.S. Consumer Product Safety Commission (CPSC) voted 3-1 to adopt ASTM International's F2057-23 voluntary safety specification as the new mandatory product safety standard for clothing storage units required under the STURDY Act.

The updated 16 CFR 1261 was published in the Federal Register on May 4th. It requires, that all clothing storage units produced on or after September 1st need to comply with ASTM F2057-23.

We provide this document for your consideration of our company in your selection of trusted service partner for this mandatory federal standard.

TÜV Rheinland thrives to be one of the world's most sustainable and independent providers of technical services for testing, inspection, certification, consultation and training. Our ethics are at the core of what we do every day, to enable our clients and colleagues to live safely, sustainably and happily in an ever changing world. In this regard, we would like highlight our commitment to our corporate values and responsibility, which lays the foundation for such an important undertaking.

Please accept our sincere appreciation for this opportunity and your effort to review this proposal. We are looking forward to a successful collaboration and working partnership.

Best Regards

Rodrigo Krause Sachetti

Stephan Pesch

Rodrigo Krause Sachetti
Global Key Account Manager
TÜV Rheinland of North America

Stephan Pesch
Intl Regulatory Compliance Specialist

www.TÜV.com

Contents

1) GET TO KNOW TÜV RHEINLAND.....	4
2) Our Global Coverage & Capabilities – Product Testing	5
3) Expansion of Test Activities	6
4) Sturdy Act. & Scope of the New Federal Safety Standard for CSUs.....	7
5) Practical Solutions for New Federal Safety Standard for CSUs.....	10
6) ASTM F2057-23 Pricing and Turnaround Time (TAT).....	10
7) Suporting the Global Program.....	11

1) GET TO KNOW TÜV RHEINLAND

TÜV Rheinland stands for quality and safety in virtually all areas of business and life. Founded 150 years ago, the company is one of the world's leading testing service providers with more than 20,000 employees and annual revenues of 2 billion euros. Our highly qualified experts test technical system and products around the world, support innovations in technology and business, train people in numerous professions and certify management systems according to international standards. Since 2006, TÜV Rheinland has been a member of the United Nations Global Compact to promote sustainability and combat corruption. We continue to further our commitment to excellence in every area of our business as a service provider, and as an industry leader.



German at heart – global in mind

52 COUNTRIES

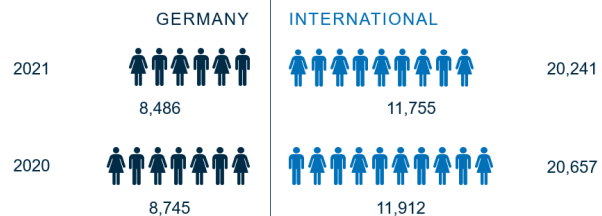
>500 LOCATIONS

238 LABORATORIES

In 1970, TÜV Rheinland began to internationalize its operations. Today we are active on all continents. From Argentina to Morocco to Vietnam.

20,241 EMPLOYEES*

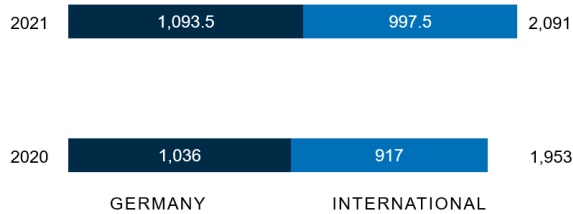
Hand in hand with specialists, auditors, examiners, engineers – the qualifications of our employees are as diverse as our tasks.



Figures 2021

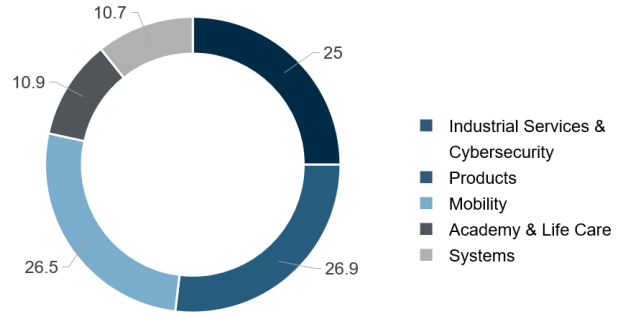
2,091 REVENUE IN € MILLIONS

Revenue Germany/International (in € millions)



Consolidated data (according to IFRS)

Revenue per Business Stream (in %)



Unconsolidated data

2) Our Global Coverage & Capabilities – Product Testing

TÜV Rheinland tests technical installations, products, and services and supervises projects, processes, and information security for companies. This is made possible by the company's global network of authorized laboratories and testing and training centers. The broad portfolio of services we offer is designed to ensure compliance with ever-changing international requirements, to protect your brand and to help you get products to market faster, saving you time and money.

Our global lab network follows ISO 17025 accreditation. We undertake external audits and accreditations by UKAS, DAkkS, CNAS, HOKLAS, ZLS and more.

- We have global lab capabilities including US, Europe, Greater China, IMEA and Asia Pacific.
- We test hard goods which covers multiple market segments. Namely, house and kitchenware, **furniture**, sanitary equipment, office supplies, camping equipment, sport & leisure articles, hygiene products, personal protective equipment for recreational use, children's goods, automotive accessories and tools.

Hardlines Testing Services

US – Europe – China – IMEA – Asia Pacific



Product Scope

- House & Kitchenware
- **Furniture**
- Sanitary
- Sports & Leisure
- PPE for Leisure
- Office & Stationary
- Outdoor Living
- Camping
- Childcare Articles
- Eye Protection
- Tools & DIY
- Motor Accessories

Testing Services

Mechanical safety:

- Stability
- Structural integrity
- Durability/lifecycle
- Designing for safety
- Operating and safety instructions

Quality and fitness for use:

- Functionality
- User friendliness
- Ease of use
- Surface quality
- Material properties (UV, corrosion)

Ecological and chemical testing:

- Contaminants
- Hygiene & Microbiology

ISTA & Packaging:

- ISTA
- 1A, 1B, 1C, 1D, 1E, 1G, 1H
- 2A, 2B, 2C
- 3A, 3B, 3E, 3F
- 4AB, 7D
- FedEx, 6-Sam's Club, 6-AMAZON
- Vibration testing - fixed or random displacement
- Shock testing
- Compression/Inclined/Clamp/Tilt/Environment
- Stress tests
- Carton Drop Test

User instructions:

- Checking
- Optimising

Inspections:

- During production / pre-shipment
- Final random / loading supervision
- Return goods analysis and remedy

Certification:

- TÜV Rheinland certified
- TÜV Rheinland GS mark
- LGA tested mark

3) Expansion of Test Activities

TÜV Rheinland Group has invested heavily in its own IT infrastructure since 2010 (rise in digitalization) to provide customers with contemporary solutions combined with maximum IT and the security of the information.

Investment has also been channelled into the construction and expansion of testing laboratories worldwide as well as extensive measures for improved environmental protection and sustainability, including through energy-efficient renovation of buildings.

In total, TÜV Rheinland invested over **EUR 400 million** in growth and its own future viability from 2016 to 2020 alone.

TÜV Rheinland North America is in a very unique space as our corporate offices of Cologne Germany are investing millions of dollars in growth by increasing capacity, capabilities, talent, subject matter experts, branding and marketing. In addition to our unique hands on customer approach, the growth investments being made are a direct result for our quickly growing base of NA retailer approvals as well as many brands and manufactures.

Furthermore, [TÜV Rheinland North America](#) has invested in the future with a brand new, multi-million dollar, 65,000 square foot sustainable mix-use laboratory-office space. Located within 12 miles from our existing facility, this new laboratory will grow in various phases, with the next phase of expansion already being worked on. This fully diverse, state of the art facility is being built from the ground up becoming first of its kind in the Northeast region.

TÜV's Technology and Innovation center will facilitate our client and partners with end to end solutions while providing space for collaboration, troubleshooting, training, meetings and customer space. The complex strategies and needs of our clients and partners will take full advantage of time savings, assist in decreasing their time to market, onsite collaboration with engineering and compliance advisors, and access to regulatory expertise.



4) STURDY Act & Scope of the New Federal Safety Standard for CSUs

The STURDY is the “Stop Tip-overs of Unstable, Risky Dressers on Youth” Act, legislation enacted in December 2022 as part of the Omnibus Spending Bill. STURDY directed the CPSC to develop a mandatory consumer product safety regulation for clothing storage furniture within one year of the date it was signed.

The updated 16 CFR 1261 was published in the Federal Register on May 4th. It refers for requirements to the ASTM on F2057-23. The new stability requirements will apply to all units within the scope of the rule ***with a manufacture date on or after September 1st***.

Under ASTM F2057-23, the scope of the new federal safety standard for CSUs encompasses free-standing clothing storage units, including *but not limited to* chests, chests of drawers, armoires, bureaus, door chests and dressers that:

- are 27 inches or greater in height; AND
- are 30 pounds or greater in weight; AND
- contain 3.2 cubic feet or greater of enclosed storage volume.

Units must meet ALL three of the above criteria to fall within the scope of the rule. These criteria were developed to cover children up to 72 months of age, which account for approximately 80 percent of all deaths related to CSU tip-overs.

ASTM F2057-23 explicitly excludes shelving units such as bookcases or entertainment furniture. It also excludes office furniture, dining room furniture, underbed drawer storage units, jewelry armoires, laundry storage/sorting units or occasional/accent furniture that is not intended for bedroom use. Many of these categories fell previously within the much broader scope of the CPSC's original Final Rule.

The following requirements in ASTM F2057-23 need to be met to comply with the new rule:

1. Simulated Clothing Load. All extendible elements and spaces behind doors are loaded with 8.5 pounds per cubic foot. All doors and loaded drawers opened. The loaded unit must remain upright for 30 seconds. (For CSUs with drawer interlocks, there is a separate test if the drawer interlocks prevent 50 percent or more of the extendible elements from opening.)

2. Simulated Horizontal Dynamic Force. With all doors open and all elements extended, a 10-pound horizontal force is applied to the highest hand-hold, not to exceed 56 inches. The unit must not tip while the force is applied to the top edge of a drawer or to the center of the pull area of the extendible element and held for 10 seconds.

3. Simulated Carpet Test *with* Child Weight. A test block of 0.43 inches is placed under the rear legs or base of the unit to simulate the impact of units placed on carpet. All doors are opened and all elements are extended. A test weight of 60 pounds is applied gradually over the top of the door or extendible element most likely to cause tip-over and remains in place for 30 seconds without causing the unit to tip over.

5) Practical Solutions for New Federal Safety Standard for CSUs

Benefits of pre-screening evaluation

Choosing to do a pre-screening evaluation of your CSU can reveal problems early, leading to faster corrective action saving cost and time and no samples needed for formal testing.

When planning to apply for the new mandatory product safety standard for clothing storage units required under the STURDY Act, organizations need to consider:

- Optional pre-screening evaluation of CSU's based on technical documents or via onsite review (local experts means faster corrections)
- Group evaluation of family of CSU's products (identical construction/material)
- Stability test according to ASTM F2057
- Label Requirement

Note: A fail result during the testing can lead to process delays and costly avoidable losses

Throughout this service an organization can provide product documentation (pictures and technical drawings) and our expertise allows us to review the CSU for potential hazards and provide a report deliverable identifying the findings.

Pricing: USD 175/hour with a minimum of 2 hours.

An additional option for pre-screening service is an onsite review based on a traffic light evaluation (Red: major risk, Yellow: further check is needed, Green: lower risk). For this service, a quote will be provided in a case-by-case basis.

6) ASTM F2057-23 Pricing and Turnaround Time (TAT)

ASTM F2057-23 – Pricing and TAT by Region

	Germany (price/product)	China (price/product)	Vietnam (price/product)	India (price/product)
1-3 products	\$ 790.00	\$ 320.00	\$ 320.00	\$ 320.00
4-10 products	\$ 710.00	\$ 300.00	\$ 280.00	\$ 280.00
11+ products	\$ 630.00	\$ 280.00	\$ 260.00	\$ 260.00
If items needs to be assembled - per hour of assembly	\$ 190.00	\$ 50.00	\$ 50.00	\$ 50.00
TAT	5-7 working days	5-7 working days	4 working days	7 working days

Proposed TÜV Rheinland's US Project Team	
<p>Global Key Account Manager</p> <p>Rodrigo Krause Sachetti</p> 	<p>Rodrigo has over 15 years of experience in product development, production, quality control, certification and factory auditing aligned with extensive expertise in managing multicultural teams and skills in technical and technological sales management.</p> <p>Brazilian, who internationally resided for several years in China, living now in Pleasanton - California.</p>
<p>Intl Regulatory Compliance Specialist Senior</p> <p>Stephan Pesch</p> 	<p>Stephan has over 15 years of experience managing furniture testing labs and is active in industry groups discussing new compliance programs.</p> <p>Committee involvement including ASTM and BIFMA covering various furniture products, home playground equipment and various juvenile products.</p>

7) Supporting the Global Program

Global Key Account Management with Regional and Local Support

TÜV Rheinland will assemble a global team of experts to service your company. This team will communicate both internally and externally on a regular basis to discuss the objectives and provide technical consultation and industry best practices. Your company will have dedicated global and regional Key Account Managers with local project coordination via Program Managers. Key account team members will be assigned based on locations where services are performed. Your network will have access to global technical experts. During onboarding, the Key Account Management team will have weekly calls with the stakeholders to ensure a smooth beginning and that expectations are aligned and met.

Our key areas of focus:

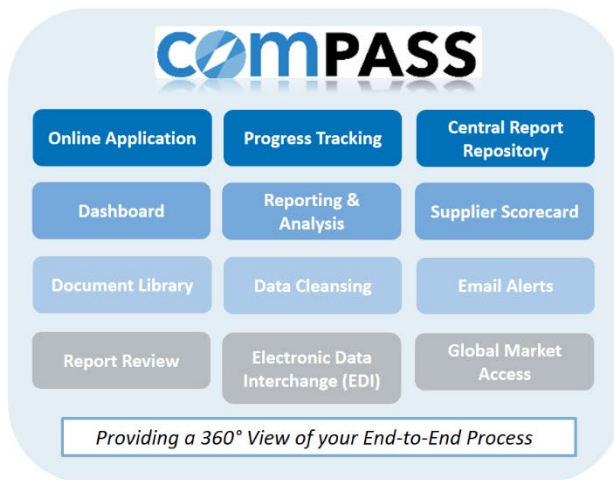


TÜV Rheinland also provides support with Information Management. ComPASS Premium Portal (CPP) as our test repository database and dashboard analytics support CPP's Online Request Management. Our request forms have a customized layout and allow for prefilled drop downs and mandatory field control. With the "copy" request feature, clients and their vendors have the ability to create a new TRF using the same information from a previous record.

Leverage our know-how along with the features and benefits that today's successful quality programs demand with ComPASS. We employ the latest technology, business intel, and user experience studies to bring you an **intuitive platform** that offers high-level operational functionality.

ComPASS Premium Portal will manage the entire product testing life cycle.

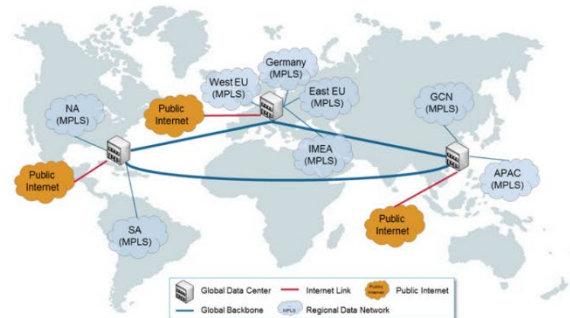
The tool that leads you to SUCCESS



TUV Rheinland Data Security

Confidence in managing your data ...

- 3 Global Data Centers: Miami, Cologne, Hong Kong
- ISO 27001 Certified
- TÜV Rheinland Online Systems are additionally tested for vulnerabilities with simulated cyber attack
- Full data back up daily, incremental every hour



Added value Services

- Training
- Webinars
- Access to technical experts globally
- Creation of SOP's and protocols as needed
- ComPASS Premium Portal
- Quarterly data review
- Dedicated key account management structure