

富美家® 特抗板
CHguard™
 CHEMICAL RESISTANT LAMINATES by FORMICA GROUP

富美家（中国）贸易有限公司 _ 北京
 地址：北京市朝阳区光华路8号和乔大厦327室 邮编：100026
 电话：(86-10) 6581-7717 传真：(86-10) 6581-6733
 Formica (China) Trading Co., Ltd. _ **Beijing Office**
 Rm.327, Grand Pacific Building, 8 Guanghua Road Chaoyang District, Beijing 100026, China
 Tel: (86-10) 6581-7717 Fax: (86-10) 6581-6733

富美家（中国）贸易有限公司 _ 上海
 地址：上海市闸北区裕通路100号宝矿洲际商务中心903 邮编：200070
 电话：(86-21) 6010-2688 传真：(86-21) 6010-2658
 Formica (China) Trading Co., Ltd. _ **Shanghai Office**
 903, BM InterContinental Business Center 100 Yutong Road, Shanghai 200070, China
 Tel: (86-10) 6010-2688 Fax: (86-21) 6010-2658

富美家（中国）贸易有限公司 _ 成都
 地址：成都市锦江区福兴街1号华敏翰尊国际大厦1412室 邮编：610016
 电话：(86-28) 8670-3160 传真：(86-28) 8670-3180
 Formica (China) Trading Co., Ltd. _ **Chengdu Office**
 Rm. 1412, Huamin Empire Plaza No.1 Fuxing Road, Jinjiang District, Chengdu 610016, China
 Tel: (86-28) 8670-3160 Fax: (86-28) 8670-3180

富美家（中国）贸易有限公司 _ 广州
 地址：广州市中山六路218-222号捷泰广场1209室 邮编：510180
 电话：(86-20) 8132-0258 传真：(86-20) 8132-0033
 Formica (China) Trading Co., Ltd. _ **Guangzhou Office**
 Rm.1209, Jie Tai Plaza, 218-222 Zhongshan Road 6, Guangzhou 510180, China
 Tel: (86-20) 8132-0258 Fax: (86-20) 8132-0033

富美家（中国）贸易有限公司 _ 东莞
 地址：东莞市南城区鸿福路200号第一国际百安中心A座1109室 邮编：523073
 电话：(86-769) 2270-2216 传真：(86-769) 2278-1770
 Formica (China) Trading Co., Ltd. _ **Dongguan Office**
 Rm.1109, 11/F, B&Q Center Block A, Hongfu Road, Nancheng District, Dongguan 523073
 Tel: (86-769) 2270-2216 Fax: (86-769) 2278-1770

富美家（中国）贸易有限公司 _ 深圳
 地址：深圳市福田区红荔西路与新洲路交汇处华茂欣园丹桂阁3B 邮编：518033
 电话：(86-755) 8287-4878 传真：(86-755) 8287-4880
 Formica (China) Trading Co., Ltd. _ **Shenzhen Office**
 Shenzhen city, Futian District Hongli West Road and Xinzhou Road Interchange,
 Dan Gui Ge, Huamao Xin Garden, 3B, China
 Tel: (86-755) 8287-4878 Fax: (86-755) 8287-4880

台湾富美家股份有限公司
 地址：台北市104南京东路三段68-70号6楼
 电话：(886-2) 2515-1017 传真：(886-2) 2517-0542
Formica Taiwan Corporation
 6TH, FL., No.68-70, Sect.3 Nanking East Rd., Taipei, Taiwan
 Tel: (886-2) 2515-1017 Fax: (886-2) 2517-0542

富美家（亚洲）有限公司
 地址：香港北角英皇道255号国都广场13楼1305-09室
 电话：(852) 2598-0117 传真：(852) 2598-6577
Formica (Asia) Limited
 Room 1305-09, 13/F., Olympia Plaza, 255 King's Road, North Point, HongKong
 Tel: (852) 2598-0117 Fax: (852) 2598-6577



富美家® 特抗板全新上市



富美家官网 | 富美家官方微信 | 富美家官方微博

Formica and the Formica logo are registered trademarks of The Diller Corporation.
 service.cn@formica.com
 www.formica.com

富美家® 特抗板™
CHguard™
 CHEMICAL RESISTANT LAMINATES by FORMICA GROUP



- 抗蚀
Corrosive Resistance
- 抗划痕
Scratch Resistance
- 抗撞
Impact Resistance
- 耐沸水
Boil Water Resistance
- 低甲醛排放
Low Emission



富美家®特抗板™全新上市

富美家®特抗板产品依照国际实验室领域SEFA规范
进行耐化学污染性能检验

- 百年企业，专业研发制造
- 新配方，新技术
- 抗蚀，抗划痕，抗撞，耐沸水，低甲醛排放
- 应用于化学与科研，生化与医疗，物理与教育等各种实验室领域轻松维护

Formica®CHguard™ had aligned with SEFA standard to test for performance on anti-chemical property

The excellent performance of new technology and new formula, can meet the needs of different laboratory table, more corrosion resistance, scratch resistance, resistance, anti water, anti radiation. The application range covers the analysis of the field of chemistry and biochemistry and medical research, education, physics and other experiments, can make the working environment more comfortable and convenient, the equipment maintenance more easily.

创造安心的专业工作学习环境 Your Professional Choice

富美家®特抗板™



关于富美家® About Formica®



富美家®公司创办人
Formica® Corporation Founders



Herbert A. Faber



Daniel J. O'Conor

富美家®始于1913
耐火板的发明者，
室内装饰材料设计的领导者

Formica Group, Since 1913
the original inventor of
laminates and continued
design leader.



现代牛津英语辞典 (O.E.D)

Formica一词已经作为专用名词收入《现代牛津英语词典》中，是现代耐火板的代名词。该辞典的第721页对于Formica一词的解释为：富美家名词，商标。坚硬耐用塑料贴面，适用于工作台、柜门及其他表面处理。

"As a professional word, "Formica" has been recorded in The Oxford English Dictionary, and as a replacement for decorative laminates."

富美家®公司于1913年由Herbert A. Faber及Daniel J. O'Conor在美国俄亥俄州辛辛那提市成立至今已有100多年的历史。成立之初所制造的产品具备耐火、防潮、耐高温的特性，于是用来取代云母片(For-Mica)，因此命名为“Formica”——富美家。

富美家®提供完成的表面饰材系列产品，包括高级装饰耐火板、抗倍特®、彩虹心®、金丽®金属装饰耐火板、富美家®麗閣®真木皮饰板、富美家®创艺板TM、色丽石®、富美家®闪星石及富美家®抗化板系列等。选用优质产品，可以确保工程质量；富美家生产的装饰耐火板符合ANS/NEMA (National Electrical Manufacturers Association) LD3-2008、欧洲BS EN438:2008标准，并获得ISO 9001:2008,14001, OHSAS 18001 GREENGUARD 认证。富美家在全球各地拥有工厂，并在亚洲地区的工厂分布于中国上海、中国九江、中国台湾地区、泰国曼谷。

你不知道富美家；但，你早已置身其中了。

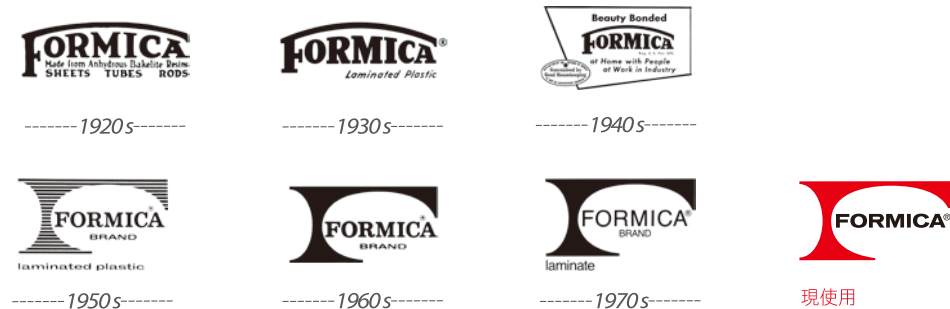
没有真正的实力，就无法满足设计师的品味与挑剔。富美家®能广受各界设计师与建筑师的青睐，不仅表现在质量提升与服务水平的坚持，尤其是它不断研发与创新饰材，让大师的灵感激荡出更多样创意。不论是公共空间或是私人居家，Formica®一个流传将近百年的品牌故事，将透过设计师的作品以及您的亲身体验，继续缔造更多的空间传说。



这个辛辛那提小工厂成立为“富美家绝缘材料公司”
The small plant in Cincinnati incorporates as "Formica Insulation Company".

富美家集团标识是世界上最知名的企业标志之一，从上世纪30年代简单的字形发展成为80年代具有醒目的，融合简洁和戏剧性的现代时尚标识。

标志的演变
Formica's LOGO History



Formica® Corporation, a multinational company, was founded in 1913 by Herbert A. Faber and Daniel J. O'Conor, who discovered that by using high pressure and plastic resins, high quality insulation materials for the booming electrical industry could be readily manufactured. Up until that point, other manufacturers were making the same products out of the minerals mica, thus, they coined their products For-Mica or "Formica®". With over 100 years of excellence in innovation and design, Formica have been setting the global benchmark for laminates ever since.

Formica® Corporation is committed to the development and promotion of new products and systems, aimed at creating more colorful visual images of space and a more convenient lifestyle. Formica® Door perfectly combines our unique product collections, such as Formica® Veneer, DecoMetal®, and Formica® Custom Graphic™, etc., to satisfy all design needs; in addition, also integrating different patterns, functions, surface materials, colors and finishes to create different styles of doors. Formica® Door can be widely used in many settings such as hospitals, schools, hotels, offices, commercial spaces, and more.

Formica® Laminate with the a variety of designs and finishes can style many different door panels designs, and offer outstanding performances such as impact resistance, heat resistance, dust resistance, easy cleaning, and low maintenance costs, etc.

Formica and the Formica Anvil Device are registered trademarks of The Diller Corporation. © 2009 The Diller Corporation

富美家®可持续发展宣言

Formica® Sustainability Statement

富美家®集团坚持秉承可持续发展的宗旨来制造和销售我们的产品。我们致力于提升使用资源的效益，从而达到保护地球环境、资源永续利用的长远目标。无论现在或将来富美家®将可持续发展视为一种商业美德和价值观，并将严格地遵守。随着国际社会越来越关注可持续性发展，富美家®集团将以为建筑师、设计师和消费者提供全方面的环保表面装饰材料作为战略重点。在富美家®集团，我们持续致力于开发新产品，营造一个更加健康的环境。

Formica® Group is committed to making sustainable principles and practices a part of everything we do. We strive to adhere to the highest ethical standards as we advance in our efforts to protect vital resources for future needs.

With sustainability a concern for the global community, Formica Group makes it a priority to offer architects, designers and consumers a full range of environmentally friendly surfacing products. Formica® Group continually strives to create innovative products that promote a healthier environment. Find out more about how we're putting "green" principles into practice.

富美家®集团斥巨资在原材料、废料管理、能源管理和排放控制等领域的各类举措，使富美家®品牌装饰耐火板、抗倍特® 金丽金属 Deco Metal®、CHguard® 特抗板等产品获得 GREENGUARD® Indoor Air Quality Certified 的担保（符合低排放产品绿色标准，同时包括特别针对儿童和学校相关要求的准则），与“绿色能源与环境设计先锋奖”联结。同时按照ISO14040的标准，对重要产品及其在整个产品生命周期内对能源、水、废弃物和温室气体造成的影响，完成了多项产品的生命周期评估（LCA）。

Formica® Group has made considerable investments in material sourcing, waste management, energy efficiency, and emission control. Formica® brand laminate, compact® are GREENGUARD indoor air quality certified® by GREENGUARD® environment institute under the GREENGUARD standard for low-emitting products, including the requirements for children & schools. Formica group has completed a LCA (life cycle assessment) in accordance with ISO14044, on key product and their environmental impacts on energy, water, waste and house gases across each of the products' full life cycle.



Greenguard

富美家®品牌各类产品均在亚洲区取得由GEI所核准的GREENGUARD™与GREENGUARD™ GOLD（特别针对儿童和学校的相关准则）。

Greenguard

Formica® laminate and DecoMetal® are GREENGUARD Indoor Air Quality Certified®, meeting the green standard for low emission product, including relevant requirements for children and school rules.

认证 Certification:



OHSAS 18001:2007

OHSAS18000职业健康安全管理体系
OHSAS 18001:2007
OHSAS18000 occupational health and safety management system



ISO9001:2008

国际质量认证企业
ISO9001:2008
International quality certificated enterprise



ISO14001:2004

环境管理体系认证企业
ISO14001:2004
Environment management system certified enterprise



中国质量认证

富美家®符合强制性产品认证规则并获得中国质量认证证书。
China quality certification
Formica® meets the compulsory product certification rules and obtained China quality certification



中国绿色环保材料认证

富美家®高级装饰耐火板、富美家®特抗板™板、富美家®抗化板、富美家®物理板获得中国绿色环保材料认证。
China green and environmental protection material certification
Formica® laminate, Formica® Compact®, Formica® CHguard™, and Formica® physical board obtained China green and environment protection material certification.



Carbon Reduction Label (减碳标签)

富美家®集团率先成为全球第一间荣获英国碳信托公司授予的碳减量标签的表面装饰耐火板制造商。

Carbon Reduction Label

Formica® group becomes the first laminates manufacturer in the world to be awarded the Carbon Trust's Carbon Reduction Label.



FSC®COC (产销监管链认证)

富美家（中国）贸易有限公司已于2013年取得FSC®COC产销监管链（Chain of Custody）验证。

FSC®COC (Chain of Custody certification)

Formica (China) Trading Co., Ltd. had been certified with FSC®COC (Chain Of Custody) certification.

CONTENTS

目录

- 01 富美家®特抗板™介绍
Formica® CHguard™
- 02 富美家®特抗板™产品应用案例
Project Reference
- 03 富美家®特抗板™产品技术参考
Performance Compliance
- 04 富美家®特抗板™产品的使用与维护
Fabrication and Maintenance

01

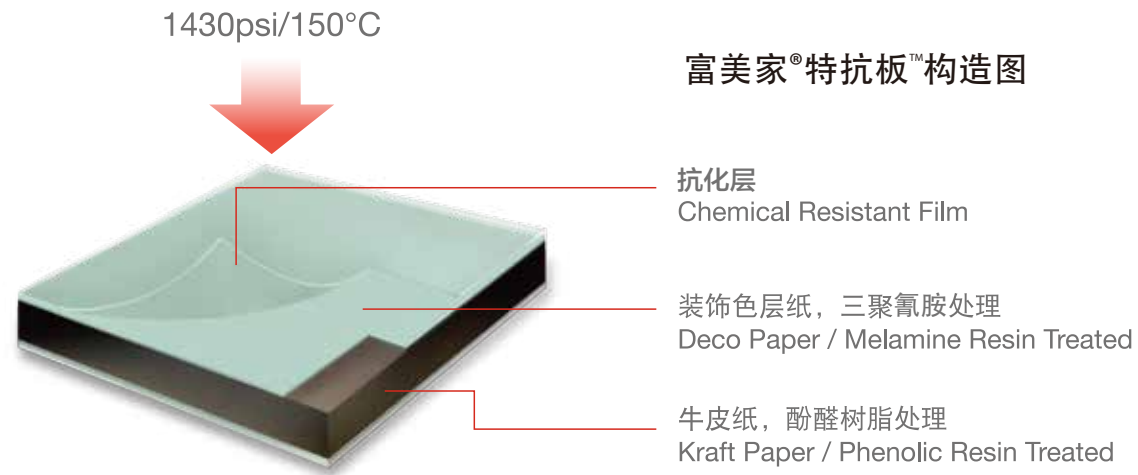
富美家®特抗板™介绍 Formica® CHguard™

富美家®特抗板™是针对实验室、医院、教育科研院所等有特殊要求的客户而开发出的专业级产品。

Formica® CHguard™ Compact grade™ is professional for laboratory, hospital, educational, and scientific research institute.

富美家®特抗板产品介绍 Product Introduction

特抗板产品规格 Product Specification



富美家®特抗板™由装饰色纸含浸三聚氰胺树脂，加上多层黑色牛皮纸含浸酚醛树脂，叠层后，再用钢板在高温（150摄氏度）高压（1430 psi）的环境压制而成，厚度可依需要从6mm到25mm皆可制作。

Compact laminate is formed by laminating decorative color sheet dipped with melamine resin and multi-layer black kraft dipped with phenolic resin and pressing with steel plate under high temperature(150 degrees centigrade) and high pressure(1430 psi). The thickness ranges from 6mm to 25mm by adjusting the number of pieces of kraft as needed.

合理规格板材，合理功能应用。5'X 10', 5'X12', and 4'X8', 4'X10', each size type follows function.



5'X10' Standard Size | 普通规格板材



5'X12' Extra Length Size | 加长规格板材

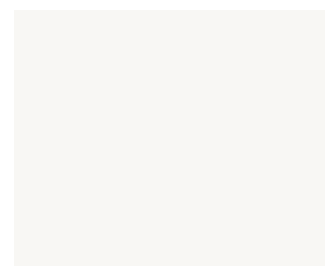
富美家®特别提供5尺规格板材，5'X 10'（1525X 3050mm），以及加长型特抗板® 5'X12'（1525X3660mm）超大型板材，对于中央实验台的设计具有经济合理的开裁独特优势。可一体成型，设立中央实验室层架和预留边置水槽位，无需拆分组装，使得一体化无缝无拼接试验台成为可能！

Formica® offer you with 5' laminate - 5'X 10'（1525X 3050mm）and extra-long Compact grade™ laminate-5'X12'（1525X3660mm）. It's economical and no-wasteful when it comes to design central experiment top, because the central experiment shelf and the cupboard for flume are set in integration, which makes integrated and seamless central experiment top possible.

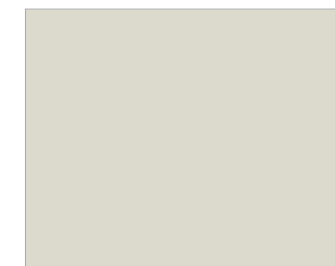
特抗板产品色彩 Product Colors

四款花色，专业呈现！

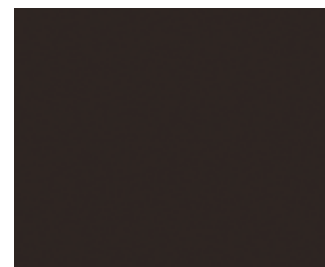
引领专业潮流指标，搭配不同色系、为您打造出高效舒适的色彩功能实验室环境。



Antique White_荷花白
3200-CH



Folkstone_晓灰
0927-CH



Black_正黑色
0909-CH



Marina_海绿
8836-CH

Four new colors, professional presentation!

CHguard™ launches 4 professional colors for functional application. With different color systems, tones make at will like the magic cube to build comfortable, high-efficiency functional laboratory environment with soft or lively vision.

* 可提供其他花色产品定制，如有需要，可洽富美家销售代表。

02

富美家®特抗板™产品应用案例 Project Reference

富美家®特抗板™系列产品不断致力于研发进取适合市场的新产品与高尖技术，伴随中国医疗卫生、教育科研领域实验室质量共同成长；并竭诚为营造出专业、舒适、高效的实验室环境，提供更贴心优质的售前售后服务，为您交出最为满意的一份成绩单。

Formica® is devoted to developing new products and high technology of CHguard® that meet the market demand and grows together with the quality of laboratories, educational and scientific research fields, we sincerely provide you with more considerate high-quality before sale and after-sale services and create a professional, comfortable and high-efficiency laboratory environment for you.

实验室 Laboratory

与实验室内的化学物品接触需要耐心和精确，所以我们把这项工作交给穿白大褂的专业人员，而由我们向他们提供一个足以应付几乎所有突发事件的工作平面。

全新打造的富美家®特抗板™能更有效抵抗化学物品的侵蚀，在恶劣条件下表现更出色。

Outstanding performance of chemical resistance is the significant characteristic of CHguard™. There are over 145 kinds of chemicals and reagents were tested with Formica® CHguard™.

医院 Hospital

在极力讲究卫生条件的生化及医疗研究工作环境下，富美家®特抗板™不受各种药剂或试剂的接触影响，在清理台面过程中也不用担心使用的各种有机溶剂及清洁剂会对实验台面造成影响。

Created by the inventors of high-pressure laminate, Formica® CHguard™ was specially formulated for easy maintenance under the harshest conditions.

教育科研院所 Educational & Scientific

在各种物理性实验室级学校机关的教学实验室，富美家®特抗板™耐撞击、抗磨损及不易刮伤等坚固特性，加上易于切割与施工的便利性，不但能常保设备如新，更能按需求创造理想中的实验环境。

Formica® CHguard™, resistant to chemical, stains, impact and heat is the best choice for every kind of physical and educational institution.



富美家®特抗板™产品应用案例

Project Reference

专业机构 Institute

- Jiangsu Research Institute of Metrology
江苏省计量科学研究院
- Jiangsu provincial quality and Technical Supervision Bureau
江苏省质量技术监督局
- Yancheng City product quality supervision and Inspection Institute
盐城市产品质量监督检验所
- Xuzhou city food and Drug Inspection Institute
徐州市食品药品检验所
- Taicang City, grain and oil quality testing center
太仓市粮油质量检测中心
- Bengbu Center for Disease Control and Prevention
蚌埠疾病预防控制中心
- Bozhou agricultural products quality inspection center
亳州农产品质检中心
- Zhejiang Datang Wushashan Power Generation Co. Ltd.
浙江大唐乌沙山发电有限公司
- Shandong Cody Zhen Pharmaceutical Co. Ltd.
山东科迪臻药业有限公司
- China Medical and Biological Research Institute
中国医药生物研究所
- Plant Research Institute of Chinese Academy of Sciences
中科院植物研究所
- Dalian water plant
大连水厂
- Changzhou siyao Pharmaceutical Co., Ltd.
常州四药制药有限公司
- Nanjing Zhengda Tianqing Pharmaceutical Co. Ltd.
南京正大天晴制药有限公司
- Lianyungang Kanion Pharmaceutical Co., Ltd.
连云港康缘药业有限公司
- Jiangsu Nanjing cigarette factory
江苏中烟南京卷烟厂
- Huaiyin cigarette factory factory
淮阴卷烟厂



- Beijing GE Industrial Park
北京GE工业园
- Akzo Nobel Coatings
阿克苏·诺贝尔涂料厂
- Daxing Dision of institute of Medical Plant Development,
Chinese Academy of Medical Sciences
中国医学科学院药物所大兴研究所大兴分部
- China Academy of Chinese Medical Science
中国中医研究所
- Institute of Nuclear Industry
核工业研究所
- Institute of Environmental Science, CAS
中国科学院环境科学院
- Beijing Entry-Exit Inspection and Quarantine
北京出入境检验检疫局
- Quanzhou City in Fujian Province Exit Inspection and Quarantine
福建省泉州市出入境检验检疫局
- Hangzhou Drug inspection
杭州药品检验所
- The Food and Drug Inspection Center of Henan Province
河南省食品药品检验中心
- The Ningxia Hui Autonomous Prefecture of Quality and Technical
Supervision and Detection
宁夏回族自治区质量技术监督检测所
- Taicang Grain and Oil Quality Supervision and Testing Station
太仓粮油质量监督检测站
- Tongcheng of Quality and Technical Inspection
桐城质量技术监督检测站
- Xuzhou City Food and Drug Administration
徐州市食品药品监督管理局
- Zhejiang Province Quality Test
浙江省质量检测院
- Chongqing Waterway Bureau Monitoring Station
重庆市水文局监测站



医院 Hospital

- Qingdao Haici medical group
青岛市海慈医疗集团
- Yanbian Maternal and Child Health-Care
Hospital
延边妇幼保健院,
- Hainan Cancer Hospital
海南肿瘤医院
- Dongguan Wangniudun hospital
东莞望牛墩医院,
- Peking University Hospital
北京大学医院
- Beijing Children's Hospital
北京儿童医院
- Beijing Friendship Hospital
北京友谊医院
- Huashan Hospital Pudong Fudan University
复旦大学附属华山医院东院
- SunYat-Sen Memorial Hospital
孙逸仙纪念医院
- Peking University International Medica
北大国际医药
- Tongrentang Pharmaceutical Co.
同仁堂药业
- Chaohu City No.2 People's Hospital
巢湖市第二人民医院
- Gansu Province Maternity and Child Care
甘肃省妇幼保健院
- Handan People's Hospital
邯郸人民医院
- Shanxi Hospital of traditional Chinese medicine
山西中医学院
- Shenyang People's Hospital
沈阳人民医院
- Zhejiang Binjiang Hospital
浙江滨江医院
- Affiliated Hospital of Zhejiang University
浙江大学附属医院
- People's Hospital of Jiaxing in Zhejiang Province
浙江嘉兴人民医院
- The No.2 People's Hospital of Zhejiang Province
浙江省第二人民医院
- The People's Hospital of Chongqing Banan
重庆巴南区人民医院
- The People's Hospital of Chongqing Xiushan
重庆秀山人民医院
- The No.2 Affiliated Hospital of Chongqing Medical
University
重庆医科大学附属第二医院
- The No.1 Affiliated Hospital of Chongqing Medical
University
重庆医科大学附属第一医院

富美家®特抗板™产品应用案例

Application's Project Reference



Sichuan Agricultural University
四川农业大学

Sichuan University
四川大学

West China Hospital
华西医院

Southwest Petroleum University
西南石油大学

Chengdu Medical College
成都医学院

Guangzhou Medical University
广州医科大学

Department of Environmental Engineering, Maoming Petroleum
Institute
茂名石油学院环境系

Department of Chemistry, Zhongkai University of Agriculture
仲恺农业学院化学系

South China Agricultural University
华南农业大学

高等院校 University

- Nanjing University
南京大学
- Nanjing Medical University
南京医科大学
- Nanjing Agricultural University
南京农业大学
- Nanjing University of Chinese Medicine
南京中医药大学
- Nanjing Normal University
南京师范大学
- China Medicine University
中国药科大学
- Soochow University
苏州大学
- Yangzhou University
扬州大学
- Jiangsu University
江苏大学

- Nanjing University of Science and Technology
南京理工大学
- Nanjing University of Information Science and Technology
南京信息工程大学
- Nanjing University of Technology
南京工业大学
- Yancheng Normal University
盐城师范大学
- Hefei University
合肥学院
- Anhui University
安徽大学
- University of Science and Technology of China
中国科技大学
- Hefei Polytechnic University
合肥工业大学
- Gansu Agricultural University
甘肃农业大学



富美家®特抗板™产品技术参考 Performance Compliance

富美家®特抗板™符合以下国家检测及标准：

富美家特抗板理化性能(32项) GB/T 17567-2013 (型式检验)

富美家特抗板物理性能 GB/T7911-2013 (型式检验)

物理性能

检验项目	标准规定值	单项判定
耐沸水性能	质量增加%	≤ 10 合格
	厚度增加%	≤ 12 合格
	外观	不低于3级 合格
耐干热性能	外观光泽	不低于3级 合格
抗大球冲击性能 (224g, 1m)	凹痕直径mm	≤ 10 合格
表面耐磨性能 转		≥ 350 合格
耐污染性能		不低于3级 合格
耐香烟灼烧性		不低于3级 合格
总尺寸稳定性 (70度, 24h)	横向	≤ 0.7 合格
	纵高	≤ 0.3 合格
耐湿热性能		不低于3级 合格
耐水蒸气性能		不低于3级 合格
抗拉强度, MPa	横向	≥ 59 合格

耐划痕

检验项目	标准规定值	判定结果
耐刮划性 (金刚石划痕法)	≥ 1.5N	合格 (1级, 5N无明显划痕)

甲醛释放量

检验项目	标准规定值	判定结果
甲醛释放量	$E_1 \leq 1.5\text{mg/L}$	合格

富美家®特抗板™产品技术参考 Performance Compliance

以下32项试剂参照GB/T 17657-2013 “人造板及饰面人造板理化性能试验方法”（4.41 表面耐污染性能测定-方法2中室温24h 测试条件）进行检验，试验结果为最优等级:5级(无明显变化)。

- 丙酮
- 盐酸37%
- 铬酸60%
- 重铬酸
- 三氯甲烷
- 氢氧化钠40%
- 甲醛/福尔马林*37%·甲酸90%
- 王水
- 硝酸65%
- 氢氟酸48%
- 二甲苯
- 四氯化碳
- 石碳酸苯酚90%
- 同比例70%硝酸、77%硫酸混合液
- 汽油
- 磷酸85%
- 双氧水3%
- 冰醋酸98%
- 高锰酸钾
- 硫化钠饱和液
- 甲苯
- 硫酸98%
- 硫酸铜
- 乙醇/酒精
- 硝酸银饱和液
- 香蕉水/天那水
- 乙醚
- 氨水28%
- 正己烷
- 四氯化碳
- 碘酊/碘酒
- 重铬酸钾清洗液

*具体检测报告可向富美家销售索取



Chemical and Stain Resistance | 抗化抗污染 (富美家内部测试)

Science Laboratories_科学实验室用品

Acid_酸

- Carbolic Acid (phenol),85%_85%石碳酸(酚)
- Citric Acid, 10% 10%柠檬酸
- Glacial Acetic Acid_冰醋酸
- Perchloric Acid, 60%_60%高氯酸

Alkalis_碱

- Potassium Hydroxide, 15%_15%氢氧化钾
- Sodium Carbonate, saturated_饱和碳酸钠

Solvents_溶剂

- Amyl Acetate_乙酸戊酯
- Benzene_苯
- Cresol甲酚
- Denatured Alcohol 变性酒精
- Dioxane_二恶烷
- Ethyl Acetate—乙酸乙酯
- Furfural_糠醛
- Methyl Ethyl Ketone_甲乙酮
- Methylence Chloride_二氯甲烷
- Mineral Spirits_矿物油精
- Naphtha_石脑油
- Tetrahydrofuran_四氢口夫纳
- Trichloroethylene_三氯乙烯

Other Reagents_其他试剂

- Calcium Hypochlorite_次氯酸钙
- Ferric Chloride, 10%_10%氯化铁
- Phenolphthalein, 1%_1%酚酞
- Sodium Bisulfite_亚硫酸氢钠
- Sodium Chloride_氯化钠
- Zinc Chloride_氯化锌

Hospital and Health Care_医院与医疗用品

- Amyl Alcohol_异戊醇
- Aniline Blue, 2.5%_2.5%苯胺蓝

- Bromocresol Green Solution_溴甲酚绿溶液
- Coal Tar Solution, 20%_20%煤焦油溶剂
- Detachol Adhesive Remover _ Detachol | 体用黏胶去除剂
- Eosin Solution_ 伊红溶液
- EucalyptoL按叶油酚
- Ferric Sub sulfate Purified, 13-14% 13-14%分析纯硫酸亚铁
- Gentian Violet, 1% Solution 1%龙胆紫溶液
- Giemsa Bloodstain 吉姆萨血液染色液
- Glycerinum Iodi Composilum_碘甘油
- Hematoxylin_ 苏木精
- Hydrogen Peroxide, 3%_3%过氧化氢
- Hydrogen Peroxide, 20%_20%过氧化氢
- Lodine Tincture, USP, 2%_2%碘酒,USP
- Isopropyl Alcohol_ 乙醇
- Mercurochrome®_ 红汞
- Methyl AlcohoL 甲醇
- Methylene Blue_ 亚甲蓝
- Mineral Oil_ 矿物油
- Petroleum Jelly_ 凡士林
- Povidine Iodine_ 优碘刷手液
- PVP Iodine Swab_PVP 碘海绵
- Steri-strip,1554 Benzoin Tincture_ 免缝胶带, 1544安息香酊
- Thimerosal硫柳汞(局部抗菌剂)
- Tincture Benzoin Compound_复方安息香酊
- Tincture Methiolate_ 硫柳汞酊
- Wrights Blood Stain_赖特染血剂
- Zephiran Chloride, 17%_17%苯扎氯铵
- Zinc Oxide_ 氯化锌

Mortician Supplies_ 殡葬用品

- Formalin 65%_65%福尔马林
- Cavres Cavity Trioxn_ 变色剂
- ColorDye#1_克 罗罗染色#1
- Dri-Cav Cavity Fluid_Dri-Cav 体腔液
- Glo-Tone Arterial Fluid_Glo-Tone脉液
- Hexaphene MA37 Autopsy Gel_已芬 MA37 解剖胶
- Inr-Tone Dye #3_Inr-Tone 染色 #3

注意事项：

在外观检查与测定以前，所列出的化学药品与试剂以覆盖方式（表面皿）与特抗板™表面直接接触16小时。以上所列的试剂多数未能损伤特抗板™的表面，然而根据接触时间长短，部分试剂可能引起特抗板™表面轻微的光泽或颜色变化。富美家®建议您用湿布与中性洗涤剂立即清除所有溅出物，如同对待高级家具表面那样。若您对任何一种不在列表内的化学药品有疑问，请洽富美家®销售或技术服务。

- Jaundice Spec. Arterial Fluid_Jaundice Spec_动脉液
- NuLeco Chemical Cauterant & Presservative_NuLeco化学腐蚀及防腐剂
- Plasdo-25 Arterial Fluid_Plasdo-25 动脉液
- PLX Arterial Fluid_PLX动脉液

Dental Supplies_ 牙科用品

- Acrylic Bonding Cement_亚克力黏结水门汀
- Amalgam_汞合金
- Disclosing Tablets_显示药片
- Enthath Phosphoric Acid Etch, 37%_37%磷酸牙蚀
- Eugenol 丁香酚
- Fluoride Rinse_ 含氟漱口
- Germicidal Disposable Cloth_ 杀菌一次布

Photo Lab Supplies_ 照相实验室用品

- D-76 Developer_D-76 显影剂
- General Purpose Fixer_定影剂
- Hypo Clearing Agent_海波清洗液
- Indicator Stop Bath 指示停显液
- Rapid Fixer with Hardener_含硬化剂的快速定影剂
- C-41 Processing (developer A, developer B, developer C,BLIX A,BLIX B, BLIX C, stabilizer)_C-41冲洗剂(显影剂A, 显影剂B, 显影剂C, BLIX A,BLIX B, BLIX C.稳定剂)
- Rapid E-6 for color sides (1st developer BLIX A, BLIX B, BLIX C)_色片用快速E-6(第一显影剂, 彩色显影剂A,彩色显影剂B, BLIX A, BLIX B, BLIX C)
- General Reagents 通用试剂
- Cellosolve_ 乙基溶纤剂
- Detergent_ 洗涤剂
- Gasoline_ 汽油 Kerosene 煤油
- Lysol® brand disinfectant来沙儿消毒水
- Nail Polish Remover_指甲去光水
- Pine Oil_ 松树油
- Sodium Hypochlorite, 5%(Clorox®)_5%次氯酸钠(Clorox牌)
- Trisodium Phosphate, 30%_30%磷酸钠
- Urea, 6.6%_6.6% 尿素
- Vegetable Oil_ 植物油

Harsh Household Product_ 腐蚀性家用产品

- Bluing: Mrs.Stewart's® concentrated liquid bluin 衣用漂白：Mrs.Stewart's®牌浓缩液体衣用漂白剂
- Ceramic Cooktop Cleaners: Cook Top cleaning creme for smooth top ranges. 瓷灶面清洗剂：COOK TOP灶面清洁膏
- Chorine Bleaches: Clorox regular, Mr.Clean® with bleach, Comet® Cleaner with bleach_含氯漂白剂：CLOROX普通型, Mr.Clean®含漂白, Comet®含漂白清洗剂

NOTICE:

The chemicals and reagents listed were placed in contact with the surface of the CHGuard™ laminate in a covered method (watch glass cover) for a period of 16 hours prior to visual examination and evaluation. Most reagents listed above did not damage the surface of the CHGuard™ laminate. However, some reagents may cause slight change in gloss or color, depending upon the duration or exposure. Period of exposure and concentration of chemicals. We recommend prompt clean of all spills, using a damp cloth and mild detergent like dealing with your fine cabinetry surfaces. If in doubt about the suitability of a particular chemical which is not listed above, please check with your Formica® contacts for further inquiry.

Fabrication and Assembly | 加工与组装

Limitations | 限制

Formica® CHGuard™ is not recommended for application directly to plaster, gypsum board, or concrete. It should not be used in areas where temperatures exceed 275°F (135°C) for prolonged periods of time, or for exterior applications. Do not expose to continuous direct sunlight. Do not chop, slice, pound or hammer on the surface of Formica® CHGuard.

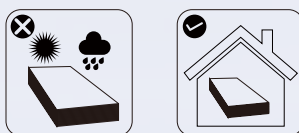
NOTE: CHGuard™ should be protected from damage caused by high heat, such as heat created from Bunsen burners. The Bunsen burner should be placed on trivet to protect the laminate surface.

NOTE: Formica®CHGuard™ incorporates a special integrated coating which gives the product its chemical-resistant properties and a slightly different hue from its corresponding standard high pressure laminate (HPL) item. This color difference does not constitute a defect. Make sure to review actual Formica®CHGuard™ samples before specifying. But joint matches between Formica®CHGuard™ and standard HPL are not recommended, while horizontal/vertical matches are acceptable. It is highly recommended that Formica®CHGuard™ be used for entire project as standard HPL will not provide chemical resistance.

富美家®特抗板™不应直接用于灰泥、石膏以及混凝土墙，不应在持续温度超过275°F (135°C) 的环境且不应在室外使用。不能暴露在持续直射光下。不能在富美家®特抗板表面斩削、切割、或重力撞击。

注意:由于煤气灯等产生的高热量会损坏抗化板，为了保护特抗板表面，应将煤气灯放置在三角架上使用。

注意:富美家®特抗板™的特殊抗化涂层使它的色调与相应的标准高压装饰板有轻微差别,此色差不构成产品缺陷。请于订货前务必查看富美家®特抗板™的样品。建议不要将富美家®特抗板™与普通耐火板对接,但可以水平或垂直搭配。同时,鉴于普通耐火板无特抗板保护,建议将特抗板用于整个工程项目。

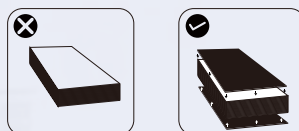


应存放于阴凉干燥场地，避免阳光直射和直接放在地面上，避免受潮。最佳存放条件是18-25°C，相对湿度45-55%，存储时间不超过6个月

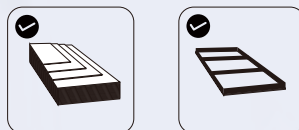
Storage | 储存

Formica®CHGuard™ should be stored horizontally, face-to-face and back-to-back with the top sheet turned face down. A caul board should be placed on top to protect the material from possible damage and reduce the chance of warpage of the top sheets. The material should be protected from light, heat and moisture and should never be stored in contact with the floor or an outside wall. It is important that CHGuard be stored at a temperature not less than 60°F (16°C) and a relative humidity not less than 40%

富美家®特抗板™应以水平、面对面、背对背、表面朝下的方式存放并且应在最上面放置垫板以防止材料可能的损坏并降低表面翘曲的可能性。注意避光防潮防热并且避免将产品与地面或者外墙直接接触。请将产品存放在温度不低于60°F (16°C)和相对湿度不低于40%的环境中



成品和半成品在包装或存放时，底部和顶部分别使用垫板和盖板，以隔绝潮湿空气对上、下板子单面的影响，防止产生翘曲



保证堆放整齐，尺寸小的板材叠于尺寸大的上面，以维持受力的均衡；台面做好假边后，堆放时中间放置适当厚度边缘条垫实，避免板材受力不均（在中间无2-3条边缘条的条件下）

Preconditioning | 预处理

Formica®CHGuard™ and substrates gain moisture and expand under high relative humidity conditions, and lose moisture and shrink under dry relative humidity conditions. Prior to fabrication, allow the Formica®CHGuard™ laminate and the substrate to acclimate for at least 48 hours at the same ambient conditions. Optimum conditions are approximately 75°F (24°C) and relative humidity of 45% to 55%. Provisions should be made for the circulation of air around the components. Formica®CHGuard™ moves about twice as much across the grain as it does in the length direction (sanding direction). Whenever possible minimize the dimension of the cross-grain direction.

NOTE: Stress cracking can result when high-moisture material is glued and subsequently exposed to low humidity conditions. Excessively dry material may expand and cause bubbling if improperly glued.

富美家®特抗板™与基材在相对湿度高的环境中会吸潮膨胀，而在干燥及相对湿度低的环境中又会失水收缩。在加工之前，请将富美家®特抗板™与基材在相同的环境中放置至少48小时。最佳的环境条件应为75°F (24°C)左右以及45%-55%的相对湿度，还应确保物件周围的空气流通。富美家®特抗板™的横向膨胀为纵向膨胀的两倍，所以在尽可能的情况下，请把横向间距减至最低。

注意:当很潮湿的材料黏合后暴露在低温环境中,可能产生受力开裂现象。而如黏合不当极度干燥的材料又可能膨胀起泡。

Cutting | 切割

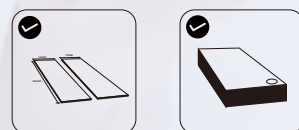
Formica®CHGuard™ has a special chemical-resistant surface. We recommend the use of sharp, carbide tipped cutting blades with low or negative hook profiles. Low feed speeds and high tool speeds are also suggested. A feather board should be clamped to the saw fence to stabilize the stock and prevent chatter, producing safer, cleaner cuts.

富美家®特抗板™有特殊的抗化表面。我们建议使用锋利的碳合金刀具，并且以中性角或负角进行切割。建议低速进给，高速切割。在铝台上应使用夹板以稳固手柄避免抖动，从而使切割更安全切口更平整。

Fabricating | 加工

To prevent from breaking, the inner corner shall remain at least 3R arc angle instead of the 90 degree right angle when inserting or punching hole on the board.

为避免因应力集中而引起的开裂，在挖洞时应避免出现锐角，所有内角的转角部分均建议保留最小弯曲半径为3.175mm的圆弧，其余边角应修平滑。

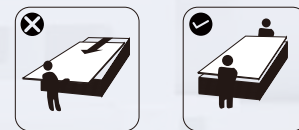


板材切割时沿长度方向裁切，以保证板材拼接时的同向拼接。贴有富美家®合格证贴纸的为产品正面，使用时正面朝上

Handling | 搬运

The Formica®CHGuard™ product need to cover with protective film. Make sure to lift the board with supportive tools or machine when you are moving it that can prevent from dragging, knocking and damage from the surface and at the corner part.

特抗板™表面必须覆保护膜，取用特抗板时一定要抬取，绝对避免在特抗板表面上拖动、碰撞，防止表面划伤和边角破损。其余边角应修平滑。



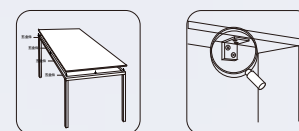
取用时一定要两人以上同时抬取，绝对避免在产品表面的拖动、碰撞，防止表面划伤和边角破损

Installation | 安装

If used as the counter top, 13mm of Formica®CHGuard™ board need to have overall structure to handle the load. Also suggest having the liquid-Stop Side wall that is over 20 mm. 使用较厚的板材加工时则需加固结构，挡水假边宽度必须大于20mm，具体可咨询富美家相关人员。

For piecing in the same surface, it's necessary to use with same direction of product, and make use of the hardware to connect. If gluing is necessary, suggest using epoxy adhesive. 同一个拼接面的C-SPC之间的安装拼接必须按照产品的横向或纵向同方向进行拼接，并采用3mm厚度的瓜子片衔接，粘结构部分建议使用AB胶、环氧胶等。

When connect with other construction material, allowance is suggested to have with over 10 mm. 与墙面或其他建筑材料连接时，必须留出足够的空间，建议大于10mm。



使用于台面安装时，必须使用螺丝固定法，同时每间隔80cm使用直角五金固定，并采用直径5mm左右的平头螺丝固定直角五金，钻孔采用带限位的枪钻以防钻孔深度过大穿透表面

To use as the lab counter top, fixed with screw is necessary and for every 50 cm, need to fix with right angle hardware. When condition is necessary, it can be strengthened by adding horizontal metal bars in the back. And notice not to penetrate through the board when using screw to fix.

与墙面或其他建筑材料连接时，使用于实验室桌面时，必须使用螺丝固定法，同时每间隔50cm使用直角五金固定，并采用直径5mm左右的平头螺丝固定直角五金，必要时应在抗化板背面加置横档，钻孔采用带有限位的枪钻以防钻孔深度过大穿透表面。

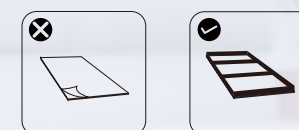
To install as the lab counter top, allowance Space between 2 pieces is necessary that can prevent from bending of expansion, especially in a possible wet area or environment. To seal the edge with silica gel is the solution also avoid the edge nearby the water tank.

安装实验室台面时，必须在两块板的接缝处留空间防止台面膨胀而造成弯曲。在潮湿的环境里，使用可调节接口预留板材的膨胀空间。使用硅胶封闭接口，但水槽附近避免有接口也应避开接缝。

Please take off the protection film away after installation is completed, otherwise the board may have the chance to deform after a period of time.

结束后应立即撕去抗化板表面的保护膜，否则在长时间下容易产生受力不均而变形。

特别声明：如由于用户使用方法、使用基材、使用环境或加工不当而造成该种抗化板不能发挥正常使用功能或造成其他质量问题，富美家公司不承担任何责任。



成品在裁切加工时，必须将双面保护膜同时保留，以保证产品两面受环境因素的影响程度一致；台面做好四周的假边后，保留两边的保护膜，切勿单面撕膜，以免影响产品单面撕膜造成翘曲。如果条件允许，建议中间加2-3条边条，抑制板子翘曲

Use and Care | 使用和保养

Formica®CHGuard™ laminate surfaces may be cleaned with a damp cloth and mild detergent. Use of abrasive cleaners, powders, scouring pads, steel wool, sandpaper, etc., will damage the finish and can permanently reduce the stain and chemical resistance of the laminate. Good laboratory practice dictates that all chemical spills should be wiped up promptly. Stubborn stains may be removed by use of organic solvent or hypochlorite bleach, followed by wiping with soft, damp Cloth. If in doubt about the suitability of a particular cleaner or detergent, check with its manufacturer.

富美家®特抗板™表面可用湿布与中性洗涤剂清洗。使用含磨料清洁剂、粉剂、百洁布、钢丝球及砂纸等会损伤产品表面并且可能永久降低产品的抗化与抗污染的能力，按照正确的实验操作规定，应立即擦拭化学溅出物。对付顽固污渍，可以先用有机溶液或高氯漂白剂，然后用柔软的湿布擦拭。如果对任何清洁剂或洗涤剂的适用性有疑问，请向生产厂家确认。

如需要进一步了解相关信息请登陆富美家官方网站 www.formica.com 查询