

Solutions for every  
programming requirement  
and environment



# Applications Guide



Education, healthcare, corporate, retail, and hospitality environments present unique program requirements that involve an understanding of the critical concerns for each application. Whether it's durability in a high school, sustainability in a corporate setting or mold and moisture resistance in a healthcare facility, the right materials can have an enormous impact on the utility and ultimate success of the project.



## Applications and Area Use

# User's Guide

The information in this brochure can help you:

- Reference programming issues important to different design environments
- Analyze critical performance issues
- Plan your designs around the critical program requirements of each space
- Select products and systems that will solve design challenges

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<b>For More Information</b>		<b>Technical Service 800 USG.4YOU  Web Site usg.com</b>

# Overview

USG has defined six performance criteria that are essential for design professionals and building owners to take into account for specific building applications.

## Performance Criteria



**Abuse.** Durability is a top priority in many environments, both to keep people safe and to reduce lifecycle costs for repairs and renovations. Different environments require different levels of abuse resistance. For example, while the school gym might only require protection from a dodgeball game, a hospital corridor might require protection from surface damage caused by wheelchairs and gurneys, and an embassy's defensible space might require protection from rifle fire. See SA929, *Abuse-Resistant Assemblies*, for more information.



**Acoustics.** Sound control refers to the ability to attenuate or absorb sound passing through a partition, floor or ceiling assembly. Depending on the function of the space, acoustical needs can be broken down into sound control between spaces, sound control within a space, and listening efficiency within a space. Performance ratings for sound control allow construction of wall, floor and ceiling assemblies that complement the purpose of the space. See SA200, *Acoustical Assemblies*, for more information.



**Aesthetics.** Appearance can define a space, establish an identity and increase productivity. While the building architecture is the most obvious definitive statement about aesthetics, smaller interior details such as levels of finish, corner treatments, and decorative interior finish systems can help make that statement consistent throughout. See SA933, *Aesthetic Assemblies*, for more information.



**Fire.** Because a building's occupants need as much time as possible to evacuate in case of a fire, it is critical to use fire-tested assemblies that comply with regulatory requirements to delay the spread of fire from one area to another. See SA100, *Fire-Resistant Assemblies*, for more information.



**Moisture.** Microscopic mold particles are found everywhere in our environment, but mold cannot grow without moisture. By controlling moisture, you can prevent the growth of mold in the most cost-effective way possible. Although suitable project conditions during storage and installation should be the first line of defense in preventing mold, products that are water-resistant can help. See SA934, *Moisture-Resistant Assemblies*, for more information.



**Sustainability.** The green building movement has become more important to building owners and architects alike. USG has always been in the vanguard of the movement to protect the environment, pioneering the use of industrial byproducts and recycled products rather than virgin materials. See SA120, *Sustainable Design*, for more information.

# Environments

While every new project has its own unique challenges, there are predictable program requirements. For education, healthcare, corporate, retail and hospitality environments, consider these factors during design and planning.

	<b>Definition</b>	<b>Challenges</b>
<b>Education</b>	Any environment where learning takes place, from childcare centers to colleges and universities to libraries. They all require designs that facilitate learning.	Wide age range of students; students with special needs; life safety needs of a large population; easy transmission of germs between students; effective hearing and communication; budget constraints for renovations and repairs; abuse resistance; large-scale food preparation areas; acoustical control to promote learning; protection from moisture and mold.
<b>Healthcare</b>	Any environment where patient care is an issue, from doctors' offices to hospitals to nursing homes. The focus is on protecting patients and helping administrators concentrate on patient care instead of building issues.	Immobile patients; patient privacy; patient comfort; upkeep of buildings that experience a lot of traffic; additions and renovations for changing healthcare needs and growing facilities; HIPAA and other government regulations; large-scale food preparation; cleanliness and sanitation of all facilities; controlled environments like laboratories; protection from moisture and mold.
<b>Corporate</b>	Any environment where people work in offices, including traditional, open plan or interactive work spaces. Designs must create environments that keep people working efficiently and provide cost-effective solutions.	Employee productivity; recruiting and retaining employees; corporate image; employee comfort and safety; sustainability; acoustical privacy.
<b>Retail</b>	Any environment where people shop for products or services, including grocery stores and malls. They all require innovative approaches for retail design to draw customers in and help them find what they need.	Customer interest; encouraging browsing; directing store traffic; large numbers of people in and out; reflecting an image; abuse resistance; lighting challenges.
<b>Hospitality</b>	Any environment designed for entertainment, including restaurants, hotels, movie theaters and conference centers. Together they share the need to please customers and to create just the right atmosphere.	Variety of customers with different needs and expectations; guest privacy; special needs customers; projecting an image; mixing business with pleasure.

# Applications

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## Administrative Offices

Administrative offices require sound privacy. Whether administrators are discussing patient issues or relaying faculty concerns, private conversations need to stay private. And to remain productive, administrators need to be able to tune out the noise around them. Open environments make privacy even harder to achieve.

## Auditoriums

Whether you're mounting theater productions, holding student assemblies or hosting community activities, auditoriums require acoustic performance and durability. While you want to prevent sound from escaping the auditorium, you must also ensure listening efficiency within the auditorium. Fire resistance is another major consideration for auditoriums where large numbers of people will congregate.

## Classrooms

Sound containment is important, so that sounds don't travel from room to room. While one classroom may be giving oral presentations, students next door may be taking an exam. And students need to be able to hear the teacher clearly, too, so sound distribution within the classroom is also important.

With even the most well-behaved students, durability is another important consideration. Chairs, desks and equipment are frequently moved around. Abuse-resistant wall panels are cheaper than concrete block, last just as long and provide a much better finished appearance.

## Corridors/Hallways

Corridors and hallways are noisy, high-traffic areas that serve as the main artery of a building. Surfaces need to be durable and resistant to abrasions, punctures and indentations. Many hospitals require the durability of conventional or veneer plaster to resist the constant unintentional damage from wheelchairs and gurneys.

## Gymnasiums

Gymnasiums need to be durable. Heavy equipment, large crowds for basketball games, and intentional abuse can take a toll on floor and wall surfaces.

Containment of sound is another consideration, since you don't want noisy gym classes disturbing students taking a test down the hall.

## Kitchens/Food Prep Areas

Kitchens and food prep areas need to be built tough to withstand the rigors of food preparation and to stand up to daily abuse from food carts, heat and humidity. They also need to meet rigorous sanitation and USDA government standards.

USG products and systems meet health and safety requirements while resisting abuse, humidity and soiling. USG offers a single-source solution for areas that need high performance, ease of installation and fire resistance.

## Laboratories/Operating Rooms Imaging Rooms

USG products are perfect for cleanrooms, sterile suites, aseptic areas, laboratories, and other environments required to meet stringent federal guidelines and requirements. Choose components that are easy to clean, corrosion-resistant and particulate-free. Systems are designed to meet or exceed national life safety codes, including seismic.

## Libraries/Media Centers

Quiet areas like libraries are conducive to learning. USG helps maintain the necessary quiet atmosphere in libraries with numerous ceiling options that provide high NRC and CAC ranges and wall systems with strong acoustical performance that help reduce noise to enhance the learning process.

Media centers require sound control both within the facility itself and from outside sources.

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**Locker Rooms  
Showers Areas/ Pools**

Extreme heat and humidity can challenge the durability of locker rooms, shower areas, pools and saunas. Choose water-resistant, sag-resistant, non-corrosive products and systems to increase the life of the facility. USG's permanent, abuse-resistant walls also ensure the long-lasting integrity of the environment.

**Lunch Rooms/Cafeterias**

Whether the lunchroom features healthy choices or is the location for impromptu meetings, major considerations are durability, sanitation and USDA government standards. And to make lunch more appetizing, use our broad palette of color, texture, size and performance to define and transform cafeteria space. Our systems offer exceptional acoustics, durability, and safety without sacrificing aesthetics.

**Nurseries/Birthing Rooms**

These areas so important to families benefit from acoustics control and a pleasing aesthetic. For the comfort of the mother and the baby, it is important to reduce the sound that travels between rooms, while an appropriate interior finish can provide a comfortable environment.

**Patient Rooms**

Patient comfort and privacy are essential, both in terms of HIPAA guidelines and to ensure a healthful or restorative environment. Life safety issues are also important, since immobile patients must have as much time as possible to escape in case of fire.

**Restrooms**

Restrooms can be especially challenging to maintain unless the inevitable exposure to moisture is considered during construction. Leaking fixtures and deliberate damage can quickly destroy a restroom. USG's products and systems provide exceptional strength and resistance to water damage, while also providing a superior base for ceramic or stone tile, mosaic, and thin brick.

**Stairways/Elevator Shafts**

Stairwells and elevators play an important role in the circulation patterns of a school, office space or healthcare facility. Not only must these areas stand up to intense traffic each and every day, but they must provide fire resistance in case of disaster. Durability and fire resistance are essential.

**Utility Rooms/Loading Docks**

Security of goods is an issue now more than ever. Since utility rooms and loading docks also take their share of abuse, look for durable products and systems that feature impact and penetration resistance.

# Education Environments

Any environment where learning takes place

Learning environments can be demanding, and not only because they may accommodate everything from pre-schoolers to graduate students. They house some of the most challenging settings, all under one roof: auditoriums, corridors, gyms, showers, pools, cafeterias, libraries, media centers, computer rooms, music rooms, laboratories, and food preparation areas.



One of the most important factors in an educational environment is acoustics. Sound control between spaces usually requires high levels of sound attenuation (that is, high resistance to sound passage). Areas that call for this type of sound control include a principal's office, classroom, dormitory, library or anyplace that requires privacy. Sound control within a space usually requires sound absorption (that is, preventing sound from reverberating within the room). Areas that need this type of sound control include classrooms, cafeterias, and gyms. Listening efficiency requires ensuring that all sounds carry to the ear of the listener. Areas that require this type of sound control include auditoriums, lecture halls, labs and classrooms.

## Broad Selection

USG offers a complete line of building products and systems designed to meet the demands of schools. Cutting-edge ceiling products, high-performing wall systems, and abuse- and fire-resistant panels provide a broad selection of color, texture, size and performance attributes that meet the needs of any environment.



# Product Selector

Area	Program Requirements	Gypsum Product Recommendations	USG Ceilings Product Recommendations
<b>Auditoriums and Gymnasiums</b>	<b>Abrasion resistance</b> <b>Impact resistance</b> <b>Acoustics</b> <b>Lifecycle costs</b> <b>Aesthetics</b>	FIBEROCK® VHI abuse-resistance interior panels, DUROCK® cement board, LEVELROCK® SLC™ floor underlayment, STRUCTO-BASE® gypsum plaster, SHEETROCK® Tuff-Hide™ primer-surfacer, USG® acoustical plaster finish, SHEETROCK and BEADEX® paper faced metal bead and trim	ROCK FACE® CLIMAPLUS™, HALCYON™ CLIMAPLUS™, COMPASSO™ suspension trim, DONN® DX/DXL™ ceiling suspension system
<b>Cafeterias</b>	<b>Acoustics</b> <b>Lifecycle costs</b> <b>Moisture and mold resistance</b>	FIBEROCK® AQUA-TOUGH™ interior panels, DUROCK cement board, LEVELROCK® PROFLOW™ floor underlayment, SHEETROCK and BEADEX paper faced metal bead and trim, TUFF-HIDE primer-surfacer	ASTRO™ CLIMAPLUS™, OLYMPIA MICRO™ CLIMAPLUS™, RADAR™ CLIMAPLUS™, RADAR™ CLIMAPLUS™ Illusions, COMPASSO suspension trim, CURVATURA™ flexible curved ceiling panels, DONN DX/DXL ceiling suspension system
<b>Classrooms</b>	<b>Acoustics</b> <b>Abrasion resistance</b> <b>Aesthetics</b> <b>Light reflectance</b>	FIBEROCK abuse-resistant interior panels, LEVELROCK floor underlayment, TUFF-HIDE primer-surfacer, USG acoustical plaster finish, SHEETROCK and BEADEX paper faced metal bead and trim, MICORE® mineral fiber board	ASTRO CLIMAPLUS, SUMMIT™ CLIMAPLUS™, DONN DX/DXL ceiling suspension system, TOUCHSTONE™ CLIMAPLUS™, ROCK FACE CLIMAPLUS, FROST™ CLIMAPLUS™
<b>Corridors</b>	<b>Abrasion resistance</b> <b>Impact resistance</b> <b>Lifecycle costs</b> <b>Acoustics</b>	TUFF-HIDE primer-surfacer, FIBEROCK VHI abuse-resistant interior panels, FIBEROCK abuse-resistant interior panels, LEVELROCK floor underlayment, USG acoustical plaster finish, SHEETROCK and BEADEX paper faced metal bead and trim	ROCK FACE CLIMAPLUS, SUMMIT CLIMAPLUS, TOUCHSTONE CLIMAPLUS, FROST CLIMAPLUS, DONN DX/DXL ceiling suspension system, USG drywall suspension system, COMPASSO suspension trim
<b>Dormitories</b>	<b>Life safety</b> <b>Lifecycle costs</b> <b>Acoustics</b> <b>Abrasion resistance</b>	STRUCTO-BASE gypsum plaster, FIBEROCK VHI abuse-resistant interior panels, FIBEROCK AQUA-TOUGH interior panels, LEVELROCK floor underlayment, LEVELROCK™ SRB™ sound board, TUFF-HIDE primer-surfacer, SHEETROCK and BEADEX paper faced metal bead and trim	USG drywall suspension system
<b>Kitchens and Food Preparation Areas</b>	<b>Moisture and mold resistance</b> <b>Abrasion resistance</b>	DUROCK cement board, FIBEROCK AQUA-TOUGH interior panels, SHEETROCK® MOLD TOUGH™ gypsum panels, LEVELROCK PROFLOW floor underlayment	CLEAN ROOM™ 100 CLIMAPLUS™, DONN® DXLA™ ceiling suspension system, SHEETROCK® CLIMAPLUS™ gypsum lay-in panels
<b>Locker Rooms and Showers</b>	<b>Wet and intermittently wet environments</b> <b>Moisture and mold resistance</b> <b>Tile backerboards</b>	DUROCK cement board, FIBEROCK AQUA-TOUGH interior panels, LEVELROCK SLC floor underlayment, DUROCK™ ceramic tile adhesive, DUROCK™ latex-modified mortars	RADAR™ Ceramic CLIMAPLUS™, SHEETROCK CLIMAPLUS gypsum lay-in panels, DONN DXLA or ZXLA™ ceiling suspension system
<b>Swimming Pools</b>	<b>Wet environments</b> <b>Moisture and mold resistance</b> <b>Tile backerboards</b>	DUROCK cement board, DUROCK ceramic tile adhesive, DUROCK latex-modified mortars	RADAR Ceramic CLIMAPLUS, DONN ZXLA ceiling suspension system
<b>Mechanical Rooms</b>	<b>Acoustics</b> <b>Fire resistance</b>	DUROCK cement board, LEVELROCK floor underlayment, FIRECODE® firestop materials, SHEETROCK® acoustical sealant	RADAR CLIMAPLUS, SHEETROCK CLIMAPLUS gypsum lay-in panels, DONN DXLA ceiling suspension
<b>Media Centers, Music Rooms and Libraries</b>	<b>Acoustics</b>	LEVELROCK floor underlayment, USG acoustical plaster finish, SHEETROCK acoustical sealant, SHEETROCK and BEADEX paper faced metal bead and trim, MICORE mineral fiber board, LEVELROCK™ SRM-25™ sound mat	ECLIPSE™ CLIMAPLUS™, SUMMIT CLIMAPLUS, DONN DX/DXL ceiling suspension system, HALCYON CLIMAPLUS, PREMIER NUBBY™ CLIMAPLUS™, FROST CLIMAPLUS, MARS™ CLIMAPLUS™
<b>Stairwells and Elevator Shafts</b>	<b>Life safety</b> <b>Acoustics</b> <b>Lifecycle costs</b> <b>Abrasion resistance</b>	SHEETROCK gypsum liner panels, SHEETROCK MOLD TOUGH gypsum liner panels, SHEETROCK® FIRECODE® Core gypsum panels, SHEETROCK® FIRECODE® C Core gypsum panels, SHEETROCK® ULTRACODE® gypsum panels, FIBEROCK AQUA-TOUGH interior panels, FIBEROCK abuse-resistant gypsum panels, DUROCK cement board, SHEETROCK and BEADEX paper faced metal beads and trims, TUFF-HIDE primer-surfacer, IMPERIAL® FIRECODE® Core gypsum base, IMPERIAL® FIRECODE® C Core gypsum base, SHEETROCK MOLD TOUGH gypsum panels, SHEETROCK acoustical sealant	

# Healthcare Applications

Any environment where patient care is an issue

Whether you're building a hospital, medical center, satellite health facility, laboratory or nursing home, your choice of materials can make a difference between a healthy and unhealthy environment. In locations where patients need to stay healthy and results need to stay reliable, moisture control is an important factor.



Because mold cannot grow without moisture, controlling moisture is the most cost-effective way to prevent the growth of mold. USG has a variety of products engineered to resist moisture, mold and sag in humid conditions such as kitchens and food prep areas, showers and physiotherapy rooms. USG provides drywall systems, tile backerboard, substrates and ceiling panels that have very high scores on ASTM D3273, the microscopic test for mold and mildew performance.

## HIPAA Requirements

Another important consideration in healthcare applications is the Health Insurance Portability and Accountability Act (HIPAA), which mandates safeguards to protect the security and confidentiality of patient health information, including oral privacy. USG's ceiling panels offer options with a high NRC (Noise Reduction Coefficient), CAC (Ceiling Attenuation Class) and AC (Articulation Class). USG has partnered with LENCORE Acoustics Corp. to offer the LENCORE® SPECTRA® sound masking system which works in tandem with USG's acoustical ceiling panels to offer innovative, customized solutions for sound masking without compromise in sound quality.

# Product Selector

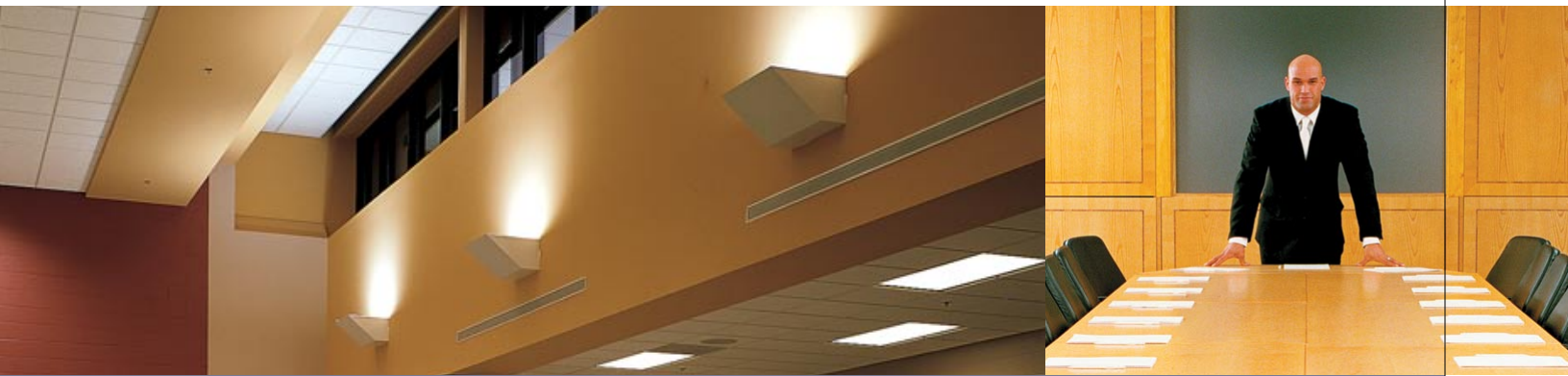
Area	Program Requirements	Gypsum Product Recommendations	USG Ceilings Product Recommendations
<b>Administrative Offices</b>	<b>Employee productivity and comfort</b> <b>Traditional and open office settings</b> <b>Acoustics</b> <b>Light reflectance</b>	MICORE mineral fiber board, USG acoustical plaster finish, SHEETROCK FIRECODE Core panels, LEVELROCK floor underlayment, SRM-25 sound mat, TUFF-HIDE primer-surfacer, SHEETROCK and BEADEX paper faced bead and trim	ECLIPSE CLIMAPLUS, MARS CLIMAPLUS, HALCYON CLIMAPLUS, SUMMIT CLIMAPLUS, DONN DX/DXL or DXF ceiling suspension system, DONN® FINELINE® grid, CENTRICITEE™ acoustical suspension system, LENCORE SPECTRA sound masking system
<b>Corridors and Hallways</b>	<b>Abrasion resistance</b> <b>Impact resistance</b> <b>Acoustics</b> <b>High-traffic areas for wheelchairs and gurneys</b> <b>Low lifecycle costs</b> <b>Durability</b>	FIBEROCK VHI abuse-resistance gypsum interior panels, LEVELROCK floor underlayment, SRM-25 sound mat, DIAMOND® veneer basecoat, SHEETROCK and BEADEX paper faced metal corner bead and trim, TUFF-HIDE primer-surfacer	ROCK FACE CLIMAPLUS, MARS CLIMAPLUS, SUMMIT CLIMAPLUS, Frost CLIMAPLUS, TOUCHSTONE CLIMAPLUS, DONN DX/DXL ceiling suspension system, LENCORE SPECTRA sound masking system, USG drywall suspension system
<b>Kitchens and Food Preparation Areas</b>	<b>Moisture and mold resistance</b> <b>Abrasion resistance</b> <b>Impact resistance</b>	DUROCK cement board, FIBEROCK AQUA-TOUGH interior panels, SHEETROCK MOLD TOUGH gypsum panels, PROFLOW floor underlayment	SHEETROCK CLIMAPLUS gypsum lay-in panels, CLEAN ROOM CLIMAPLUS, DONN DXLA ceiling suspension system
<b>Laboratories</b>	<b>Controlled environments</b> <b>ASTM cleanroom guidelines</b> <b>Moisture and mold resistance</b>	DUROCK cement board, FIBEROCK AQUA-TOUGH interior panels, SLC floor underlayment	SHEETROCK CLIMAPLUS gypsum lay-in panels, CLEAN ROOM CLIMAPLUS, DONN DXLA or ZXLA ceiling suspension system
<b>Nurseries and Birthing Rooms</b>	<b>Aesthetics</b> <b>Acoustics</b>	USG decorative interior finish system, USG acoustical plaster finish, LEVELROCK floor underlayment, SRM-25 sound mat, TUFF-HIDE primer-surfacer	CLEAN ROOM CLIMAPLUS, DONN DX/DXL or DXLA ceiling suspension system, ASTRO CLIMAPLUS, TOUCHSTONE CLIMAPLUS
<b>Operating and Imaging Rooms</b>	<b>Controlled environments</b> <b>ASTM cleanroom guidelines</b> <b>Moisture and mold resistance</b> <b>Impact resistance</b> <b>Non-ferrous products</b> <b>Light reflectance</b>	DUROCK cement board, FIBEROCK AQUA-TOUGH interior panels, SLC floor underlayment	SHEETROCK CLIMAPLUS gypsum lay-in panels, CLEAN ROOM CLIMAPLUS, DONN DX/DXL, DXLA or ZXLA ceiling suspension system
<b>Patient Rooms</b>	<b>Comfort, privacy, protection</b> <b>Fire resistance</b> <b>Acoustics</b> <b>Moisture control</b> <b>Life safety issues</b> <b>Aesthetics</b>	FIBEROCK AQUA-TOUGH interior panels, LEVELROCK floor underlayment, TUFF-HIDE primer-surfacer, SHEETROCK and BEADEX paper faced metal corner bead and trim	ASTRO CLIMAPLUS, ECLIPSE CLIMAPLUS, FROST CLIMAPLUS, MARS CLIMAPLUS, Touchstone CLIMAPLUS, LENCORE SPECTRA sound masking system, DONN DX/DXL ceiling suspension system
<b>Stairwells and Elevator Shafts</b>	<b>Life safety</b> <b>Acoustics</b> <b>Lifecycle costs</b> <b>Moisture</b> <b>Abrasion resistance</b>	SHEETROCK gypsum liner panels, SHEETROCK MOLD TOUGH gypsum liner panels, SHEETROCK FIRECODE Core gypsum panels, SHEETROCK FIRECODE C Core gypsum panels, SHEETROCK ULTRACODE gypsum panels, FIBEROCK AQUA-TOUGH interior panels, FIBEROCK abuse resistant gypsum panels, DUROCK cement board, SHEETROCK and BEADEX paper metal beads and trims, TUFF-HIDE primer-surfacer, IMPERIAL FIRECODE gypsum base, IMPERIAL FIRECODE C Core gypsum base, SHEETROCK MOLD TOUGH gypsum panels, SHEETROCK acoustical sealant	

# Office Environments

Any office space environment within the context of a corporation or non-profit

Fire resistance, acoustics and sustainability are all important concerns when designing office environments.

Corporations and non-profits have a major investment in business assets that can easily go up in smoke. Damage to equipment such as computers, servers and networks can destroy not only a capital investment, but a company's knowledge base.



**Acoustics can affect productivity. To keep workers productive, office environments must include:**

- Quiet areas such as executive boardrooms, private offices and libraries
- Noise control for high-traffic areas such as cafeterias, corridors, and mechanical/utility rooms
- Reflection of useful sound in conference areas

By minimizing noise from outside the building, ventilation systems, etc., architects can help employees lead more constructive work lives. We offer ceiling panels with a high NRC (Noise Reduction Coefficient), CAC (Ceiling Attenuation Class) and AC (Articulation Class). LENCORE's sound masking system works in tandem with USG's acoustical ceiling panels to offer customized solutions for sound masking.

## Sustainability

Using green building materials and being housed in a sustainable building are good ways for a corporation to enhance its image as a friend of the environment. Our gypsum products have up to 99% recycled content, while ceiling products have up to 78% recycled content. By using industrial byproducts such as recaptured gypsum, fly ash and slag, and recycled products such as waste paper and metal, we reduce the landfill burden and improve the environment.

# Product Selector

Area	Program Requirements	Gypsum Product Recommendations	USG Ceilings Product Recommendations
<b>Corridors and Hallways</b>	<b>Aesthetics</b> <b>Abrasion resistance</b> <b>Low maintenance</b> <b>Lifecycle costs</b>	FIBEROCK AQUA-TOUGH interior panels, STRUCTOCORE® security wall systems, LEVELROCK floor underlayment, SHEETROCK and BEADEX paper faced metal bead and trim, MICORE mineral fiber board, TUFF-HIDE primer-surfacer	ROCK FACE CLIMAPLUS, FROST CLIMAPLUS, SUMMIT CLIMAPLUS, COMPASSO suspension trim, C² Paired COMPASSO™ channels, USG drywall suspension system, DONN DX/DXL ceiling suspension system
<b>Executive Areas, Conference Areas and Board Rooms</b>	<b>Abrasion resistance</b> <b>Acoustics</b> <b>Aesthetics</b>	LEVELROCK floor underlayment, SRM-25 sound mat, MICORE mineral fiber board, USG acoustical plaster finish, SHEETROCK and BEADEX paper faced metal bead and trim, SHEETROCK acoustical sealant, TUFF-HIDE primer-surfacer	BILLO™ 3-D, HALCYON CLIMAPLUS, MARS CLIMAPLUS, CLIMAPLUS, SANDRIFT CLIMAPLUS, TOPO™ 3-D ceiling system, COMPASSO suspension trim, CURVATURA 3-D system, PANZ® metal specialty ceiling panels, CELEBRATION™ metal specialty ceiling panels, DONN DX/DXL ceiling suspension system, DONN FINELINE grid, CENTRICITEE acoustical suspension system
<b>Health and Fitness</b>	<b>Aesthetics</b> <b>Abuse</b>	DUROCK cement board, LEVELROCK floor underlayment, SHEETROCK and BEADEX paper faced metal corner beads and trims, TUFF-HIDE primer-surfacer	ASTRO CLIMAPLUS, ROCK FACE CLIMAPLUS, SUMMIT CLIMAPLUS, TOUCHSTONE CLIMAPLUS, COMPASSO suspension trim, DONN ZXLA ceiling suspension systems
<b>Lobbies and Reception</b>	<b>Aesthetics</b> <b>Vaults, domes, arches, reveals</b> <b>Acoustics</b> <b>Defensible space</b>	STRUCTOCORE™ security wall systems, SHEETROCK gypsum panels, LEVELROCK floor underlayment, DIAMOND veneer basecoat, IMPERIAL veneer finish, TUFF-HIDE primer-surfacer, MICORE mineral fiber board, SHEETROCK and BEADEX paper faced metal bead and trim	SANDRIFT CLIMAPLUS, BRIO™ CLIMAPLUS™, USG drywall suspension system, COMPASSO suspension trim, TOPO 3-D ceiling system, TRANSLUCENTS™ luminous, TRANSPARENCIES™ luminous, BILLO 3-D, DONN FINELINE grid, CENTRICITEE acoustical suspension system, DONN DX/DXL ceiling suspension system
<b>Open Plan Offices</b>	<b>Large open spaces</b> <b>Productivity</b> <b>Acoustics</b>	USG acoustical plaster finish	ECLIPSE CLIMAPLUS, HALCYON CLIMAPLUS, MARS CLIMAPLUS, MILLENNIA CLIMAPLUS High NRC, DONN DX/DXL ceiling suspension system, CENTRICITEE acoustical suspension system, DONN FINELINE grid, LENCORE SPECTRA sound masking system
<b>Restrooms, Utility Areas and Loading Docks</b>	<b>Moisture control</b> <b>Abuse resistance</b> <b>Defensible space</b>	TUFF-HIDE primer-surfacer, DUROCK cement board, DUROCK cement underlayment, FIBEROCK AQUA-TOUGH interior panels, FIBEROCK AQUA-TOUGH underlayment, SHEETROCK MOLD TOUGH gypsum panels, SHEETROCK MOLD TOUGH gypsum liner panels, STRUCTOCORE security wall systems, DUROCK ceramic tile adhesive, DUROCK latex-modified mortars	SHEETROCK CLIMAPLUS gypsum lay-in panels, DONN DXLA or ZXLA ceiling suspension systems
<b>Stairwells and Elevator Shafts</b>	<b>Life safety</b> <b>Acoustics</b> <b>Lifecycle costs</b> <b>Abrasion resistance</b> <b>Moisture resistance</b>	SHEETROCK gypsum liner panels, SHEETROCK MOLD TOUGH gypsum liner panels, SHEETROCK FIRECODE Core gypsum panels, SHEETROCK FIRECODE C Core gypsum panels, SHEETROCK ULTRACODE gypsum panels, FIBEROCK AQUA-TOUGH interior panels, FIBEROCK abuse resistant gypsum panels, DUROCK cement board, SHEETROCK and BEADEX paper faced metal bead and trim, TUFF-HIDE primer-surfacer, IMPERIAL FIRECODE gypsum base, IMPERIAL FIRECODE C Core gypsum base, SHEETROCK MOLD TOUGH gypsum panels, SHEETROCK acoustical sealant	
<b>Traditional Offices</b>	<b>Employee productivity</b> <b>Acoustics</b>	SHEETROCK FIRECODE Core panels, LEVELROCK floor underlayment, MICORE mineral fiber board, USG acoustical plaster finish, SHEETROCK acoustical sealant, TUFF-HIDE primer-surfacer, SHEETROCK and BEADEX paper faced metal bead and trim	ECLIPSE CLIMAPLUS, MARS CLIMAPLUS, HALCYON CLIMAPLUS, SUMMIT CLIMAPLUS, FROST CLIMAPLUS, DONN DX/DXL ceiling suspension system, DONN FINELINE grid, CENTRICITEE acoustical suspension system, LENCORE SPECTRA sound masking system

# Retail Environments

Any environment where people shop for products or services

While creating a unique environment that brings in customers is essential for retail environments, lifecycle costs are also important when businesses need to watch their bottom line. Cutting costs in the initial construction phase may please a client, but the long-range costs are the ones that really add up. How do partitions and ceilings hold up over the life of the building? What is the level of indentation, abrasion and penetration resistance? Has mold gained a foothold? How easy is maintenance?



USG manufactures products and systems that are designed to hold up under everything from routine maintenance and food cart wear and tear to armed assault. Of course most retail establishments aren't expecting armed assaults, but for banks, currency exchanges and even jewelers and furriers, it's comforting to know that assets can be protected.

## Responsible Partner

USG assemblies are thoroughly tested to comply with regulatory requirements. Products and systems are carefully tested to ensure that they stand up under real-life conditions. By using recaptured gypsum, fly ash and slag, and recycled products such as waste paper and metal, we reduce the landfill burden and improve the environment.

# Product Selector

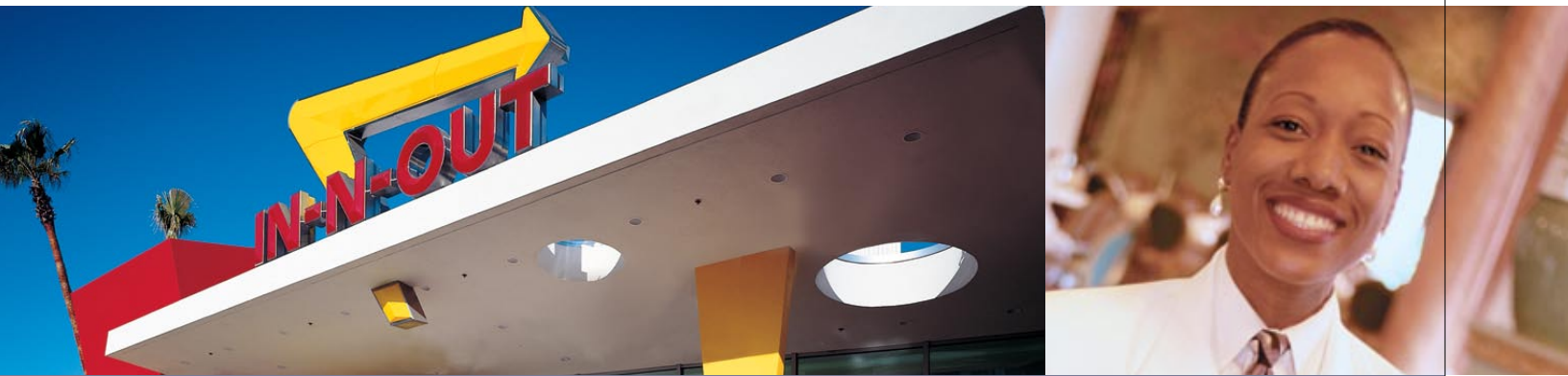
Area	Program Requirements	Gypsum Product Recommendations	USG Ceilings Product Recommendations
<b>Department Stores and Boutiques</b>	<b>Signature look</b> <b>Acoustics</b> <b>Encourage browsing</b> <b>Trendy</b>	PROFLOW floor underlayment, TUFF-HIDE primer-surfacer, USG decorative interior finish system, SHEETROCK and BEADEX paper faced metal bead and trim	BILLO 3-D, BRIO <i>CLIMAPLUS</i> , ECLIPSE <i>CLIMAPLUS</i> , FRESCO <i>CLIMAPLUS</i> , FROST <i>CLIMAPLUS</i> , GEOMETRIX™ 3-D metal ceiling panels, SANDRIFT <i>CLIMAPLUS</i> , TOPO 3-D, DONN FINELINE grid, COMPASSO suspension trim, PARALINE® linear metal ceiling system, DONN DX/DXL ceiling suspension system, CENTRICITEE acoustical suspension system
<b>Garages</b>	<b>Durability</b>	FIBEROCK abuse-resistant gypsum interior panels, SLC floor underlayment, SHEETROCK and BEADEX paper faced metal corner bead and trim, TUFF-HIDE primer-surfacer, FIRECODE firestop materials	SHEETROCK <i>CLIMAPLUS</i> gypsum lay-in panels, RADAR Ceramic <i>CLIMAPLUS</i> ceiling panels, DONN DXLA or ZXLA ceiling suspension system
<b>Grocery Stores</b>	<b>Durability</b> <b>Moisture and mold resistance</b> <b>Abuse resistance</b> <b>Low lifecycle costs</b> <b>Economy</b>	FIBEROCK AQUA-TOUGH interior panels, DUROCK cement board, DUROCK underlayment, SHEETROCK MOLD TOUGH gypsum panels, TUFF-HIDE primer-surfacer, PROFLOW floor underlayment	ASTRO <i>CLIMAPLUS</i> , ORION™ 210 <i>CLIMAPLUS</i> ™, PREMIER HI-LITE <i>CLIMAPLUS</i> , RADAR <i>CLIMAPLUS</i> Illusions, DONN DX/DXL ceiling suspension system, GRIDWARE™ open-cell suspension system, COMPASSO suspension trim, C² Paired COMPASSO channels
<b>Mall Interior Spaces</b>	<b>Encourage browsing</b> <b>Inviting</b> <b>Aesthetics</b> <b>Abuse resistance</b> <b>Durability</b>	DUROCK cement board, FIBEROCK VHI abuse-resistant gypsum interior panels, PROFLOW floor underlayment, TUFF-HIDE primer-surfacer, SHEETROCK and BEADEX paper faced metal corner bead and trim	USG drywall suspension system, CURVATURA flexible curved ceiling panels, TOPO 3-D ceiling system, BILLO 3-D, GEOMETRIX 3-D metal ceiling panels, PARALINE linear metal ceiling system
<b>Warehouses</b>	<b>Abuse resistance</b> <b>Durability</b>	SLC floor underlayment, FIRECODE firestop materials, SHEETROCK and BEADEX paper faced metal corner bead and trim, TUFF-HIDE primer-surfacer	ORION 210 <i>CLIMAPLUS</i> , RADAR <i>CLIMAPLUS</i> , SHEETROCK <i>CLIMAPLUS</i> gypsum lay-in panels, DONN DX/DXL or DXLA ceiling suspension system

# Hospitality Environments

Any environment designed for congenial gatherings

Fire resistance, acoustics and aesthetics are primary considerations in the design of hospitality environments.

Guests shouldn't have to worry about fire. They have more important things to think about, such as figuring out where to eat and when they need to leave to catch the airport limo.



Guests may want to relax at night and listen to movies, sports events and the news, but one thing they don't want to hear is the people in the room next door. Whether or not a guest gets a good night's sleep may determine whether that guest returns for a future visit.

The look and feel of a hospitality environment can either pull people in or drive people away. Whether the look is antique or contemporary, moneyed or frugal, restrained or colorful, aesthetics choices play an important role.

## Better Options

USG's fire- and sound-tested floor, wall and ceiling assemblies comply with regulatory requirements and help architects make informed choices. And options ranging from dramatic domes, vaults and reveals to interior finishing systems can make it easier to achieve a look that is eye-catching and inviting.



# Product Selector

Area	Program Requirements	Gypsum Product Recommendations	USG Ceilings Product Recommendations
<b>Bars, Restaurants and Dining Areas</b>	<b>Relaxation, conversation and entertainment</b> <b>Acoustics</b> <b>Aesthetics</b> <b>Durability</b>	FIBEROCK abuse-resistant gypsum interior panels, DUROCK cement board, LEVELROCK floor underlayment, USG decorative interior finish system, SHEETROCK and BEADEX paper faced metal corner bead and trim, TUFF-HIDE primer-surfacer, MICORE mineral fiber board	BRIO <i>CLIMAPLUS</i> , ECLIPSE <i>CLIMAPLUS</i> , FRESCO <i>CLIMAPLUS</i> , FROST <i>CLIMAPLUS</i> , SANDRIFT <i>CLIMAPLUS</i> , CURVATURA 3-D system, TOPO 3-D, DONN DX/DXL ceiling suspension system, CENTRICITEE acoustical suspension system, DONN FINELINE grid
<b>Convention and Meeting Rooms</b>	<b>Acoustics</b> <b>Aesthetics</b>	LEVELROCK floor underlayment, USG acoustical plaster finish, TUFF-HIDE primer-surfacer, SHEETROCK and BEADEX paper faced metal corner bead and trim, MICORE mineral fiber board	FROST <i>CLIMAPLUS</i> , HALCYON <i>CLIMAPLUS</i> , SANDRIFT <i>CLIMAPLUS</i> , SUMMIT <i>CLIMAPLUS</i> , COMPASSO suspension trim, DONN DX/DXL ceiling suspension system, CENTRICITEE acoustical suspension system, DONN FINELINE grid
<b>Corridors and Hallways</b>	<b>High-traffic areas</b> <b>Abuse resistance</b> <b>Durability</b> <b>Aesthetics</b> <b>Low lifecycle costs</b>	FIBEROCK abuse-resistant gypsum interior panels, LEVELROCK floor underlayment, SHEETROCK and BEADEX paper faced metal corner bead and trim, TUFF-HIDE primer-surfacer, MICORE mineral fiber board	FROST <i>CLIMAPLUS</i> , ROCK FACE <i>CLIMAPLUS</i> , TOUCHSTONE <i>CLIMAPLUS</i> , SUMMIT <i>CLIMAPLUS</i> , DONN DX/DXL ceiling suspension system, USG drywall suspension system
<b>Exterior Soffits and Indoor Parking Garages</b>	<b>Dynamic entrances and transitions</b> <b>Abuse resistance</b> <b>Durability</b> <b>Moisture resistance</b>	DUROCK cement board, FIBEROCK AQUA-TOUGH sheathing, FIBEROCK AQUA-TOUGH interior panels, SHEETROCK gypsum sheathing, SHEETROCK exterior ceiling board	USG drywall suspension system, DONN ZXLA ceiling suspension system, SHEETROCK gypsum lay-in panel ceiling
<b>Galleries and Exhibit Spaces</b>	<b>Abrasion resistance</b> <b>Aesthetics</b>	PROFLOW floor underlayment, USG decorative interior finish system, TUFF-HIDE primer-surfacer, SHEETROCK and BEADEX paper faced metal corner bead and trim	BRIO <i>CLIMAPLUS</i> , FRESCO <i>CLIMAPLUS</i> , FROST <i>CLIMAPLUS</i> , MARS <i>CLIMAPLUS</i> , SANDRIFT <i>CLIMAPLUS</i> , ECLIPSE <i>CLIMAPLUS</i> , COMPASSO suspension trim, CURVATURA 3-D system, DONN DX/DXL ceiling suspension system, DONN FINELINE grid, CENTRICITEE acoustical suspension system
<b>Guest Rooms and Suites</b>	<b>Comfort</b> <b>Customized look and feel</b> <b>Privacy</b> <b>Acoustics</b>	USG acoustical plaster finish, SHEETROCK gypsum panels, LEVELROCK floor underlayment, SRM-25 sound mat, TUFF-HIDE primer-surfacer, SHEETROCK and BEADEX paper faced metal bead and trim, MICORE mineral fiber board	USG drywall suspension system
<b>Health and Fitness</b>	<b>Abrasion resistance</b>	DUROCK cement board, SHEETROCK and BEADEX paper faced metal corner bead and trim, TUFF-HIDE primer-surfacer	ASTRO <i>CLIMAPLUS</i> , ROCK FACE <i>CLIMAPLUS</i> , SUMMIT <i>CLIMAPLUS</i> , TOUCHSTONE <i>CLIMAPLUS</i> , DONN DXLA or ZXLA ceiling suspension system, COMPASSO suspension trim
<b>Lobbies and Reception</b>	<b>Aesthetics</b> <b>Signature look</b> <b>Acoustics</b> <b>Abrasion resistance</b>	LEVELROCK floor underlayment, USG acoustical plaster finish, USG decorative interior finish system, SHEETROCK and BEADEX paper faced bead and trim, TUFF-HIDE primer-surfacer, MICORE mineral fiber board	BRIO <i>CLIMAPLUS</i> , ECLIPSE <i>CLIMAPLUS</i> , FRESCO <i>CLIMAPLUS</i> , FROST <i>CLIMAPLUS</i> , SANDRIFT <i>CLIMAPLUS</i> , USG drywall suspension system, COMPASSO suspension trim, CURVATURA 3-D system, TOPO 3-D, BILLO 3-D, DONN DX/DXL ceiling suspension system, DONN FINELINE grid, CENTRICITEE acoustical suspension system
<b>Restrooms, Utility Areas and Loading Docks</b>	<b>Moisture resistance</b> <b>Abrasion resistance</b> <b>Impact resistance</b> <b>Abuse resistance</b>	DUROCK cement board, DUROCK underlayment, SLC floor underlayment, FIBEROCK AQUA-TOUGH interior panels, FIBEROCK AQUA-TOUGH underlayment, FIBEROCK AR VHI gypsum interior panels, SHEETROCK MOLD TOUGH gypsum panels, SHEETROCK MOLD TOUGH gypsum liner panels, TUFF-HIDE primer-surfacer	RADAR Ceramic <i>CLIMAPLUS</i> , SHEETROCK <i>CLIMAPLUS</i> gypsum lay-in panels, DONN DXLA or ZXLA ceiling suspension system
<b>Theatres</b>	<b>Aesthetics</b> <b>Acoustics</b>	USG acoustical plaster finish, TUFF-HIDE primer-surfacer, MICORE mineral fiber board	RADAR <i>CLIMAPLUS</i> flat black, USG drywall suspension system, CURVATURA flexible curved ceiling panels, DONN DX/DXL ceiling suspension system

# Resources

## lencore.com

USG has teamed with LENCORE Acoustics Corp., the leader in sound masking technology, to offer the ultimate solution to meet acoustical and speech privacy needs. In facilities around the world, Fortune 500 companies rely on sound masking ceiling systems from USG and LENCORE Acoustics to make their workspaces more comfortable and productive. These systems are also helping businesses comply with federal privacy rules in the healthcare and financial industries.

## usg.com

Provides the most current product and system information, building solutions and online tools from USG including:

### **Domes and Vaults Estimator**

Generate drawings, bill of materials and illustrated, step-by-step installation instructions for building curved ceilings with the USG drywall suspension system.

### **Topo and GEOMETRIX Design Tools**

Generate, present, and specify three-dimensional designs for these popular specialty ceiling systems.

### **Case Studies**

Learn how architects and contractors across the continent have tackled a host of design challenges with building products from USG.

## Industry Web Sites

### **U.S. Environmental Protection Agency**

[epa.gov/iaq](http://epa.gov/iaq)

### **New York City Department of Health**

[nyc.gov/html/doh/home.html](http://nyc.gov/html/doh/home.html)

### **Gypsum Association**

[gypsum.org](http://gypsum.org)

## Technical Assistance

### **800 USG.4YOU**

Expert advice for any project-related inquiries.

### **USG Gypsum Construction Handbook**

The industry's best resource for good construction practices.

### **THE SOLUTIONS CENTER<sup>SM</sup>**

Located in Chicago, this multifunctional loft space is a working studio where architects, designers and building professionals meet with USG experts to discuss current projects and learn about the latest design innovations.





**Technical Service**  
800 USG.4YOU

**Web Site**  
usg.com

**Samples/Literature**  
888 874.2450

**Samples/Literature E-mail**  
samplit@usg.com

**Samples/Literature Fax**  
888 874.2348

**Customer Service**  
800 950.3839

**Product Information**

See usg.com for the most up-to-date product information.

**Metric Specifications**

USG Corporation, through its operating subsidiaries, will provide metric conversions on its products and systems to help specifiers match metric design sizes. In addition, some products are available in metric dimensions from selected manufacturing plants. Refer to SA100, *Fire-Resistant Assemblies*, for additional information and a Table of Metric Equivalents.

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**Note**

All products described here may not be available in all geographic markets. Consult your local sales office or representative for information.

**Safety First!**

Follow good safety and industrial hygiene practices during handling and installation of all products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.



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