



# TOTAL ACOUSTICS<sup>®</sup>

NOW FOR  
WOOD,  
METAL,  
& TECTUM<sup>®</sup>

Inspiring Great Spaces<sup>®</sup>

**Armstrong<sup>®</sup>**  
CEILING & WALL SOLUTIONS

# TOTAL Noise Control & Design Flexibility

Good, Better, Best  
recommendations  
make it easy to  
choose the system  
that's right for  
your spaces.

**BEST**

Total Acoustics Performance™ provides the ideal combination of sound absorption and sound blocking. Sound absorption reduces noise while sound blocking keeps it from traveling into adjacent spaces.

Together these attributes help you create quiet spaces. So whether you are trying to reduce noise in concentration or focus spaces, creating collaborative environments, or working to ensure confidentiality, get total noise control and design flexibility with Total Acoustics ceiling panels.

**BETTER**

**GOOD**



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SOUND PERFORMANCE  
FOR EVERY SPACE



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CEILING SOLUTIONS  
FOR EVERY SPACE

## For WoodWorks<sup>®</sup>, MetalWorks<sup>™</sup>, TECTUM<sup>®</sup> and Shapes Solutions:

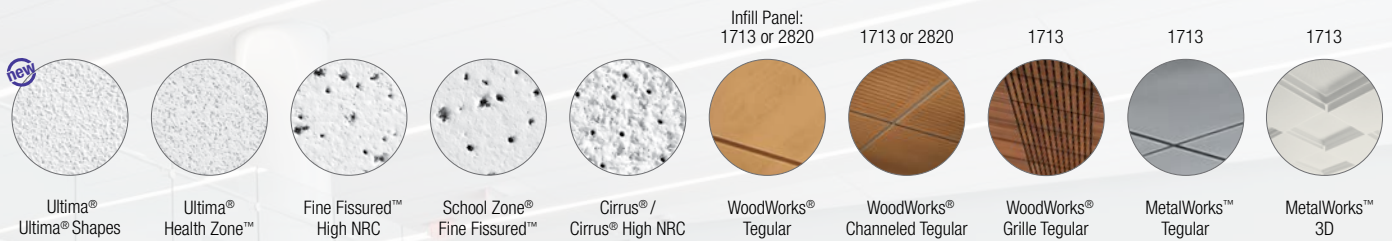
Acoustics performance for these ceilings is determined by the product, perforation, and infill panel.

See product data pages for detailed information.

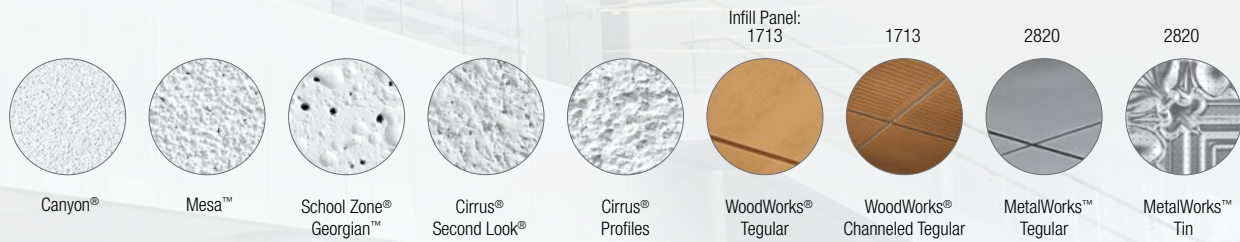
### Total Acoustics = NRC 0.80+ and CAC 35+



### Total Acoustics = NRC 0.70-0.75 and CAC 35+



### Total Acoustics = NRC 0.60-0.65 and CAC 35+



NRC  
+ CAC  
= Total Acoustics  
Performance<sup>™</sup> 



# GREAT ACOUSTICS by Design

Today, noise is the number one complaint in the workplace. Now, you can help solve it with Total Acoustics Performance™.

# Ideal Sound Performance for Every Space

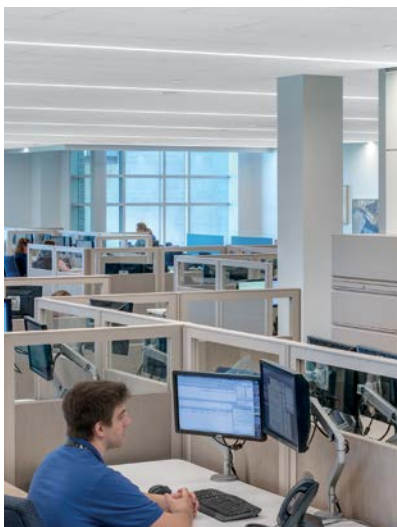
## Effectively Absorb & Block Sound

- No need for full height, floor-to-deck walls when you specify Total Acoustics® ceiling panels – making future space re-configurations easier.
- No need for extra plenum barriers.

## Absorption is Not a Substitute for Blocking

- Ceiling panels with high sound absorption (NRC) and low sound blocking (CAC) are unable to provide the confidential speech privacy that Total Acoustics Performance™ offers.

All ceilings with Total Acoustics Performance™ have a CAC of 35 or higher, the ideal value to deliver the sound blocking you need.



FOCUS SPACES



COLLABORATIVE SPACES

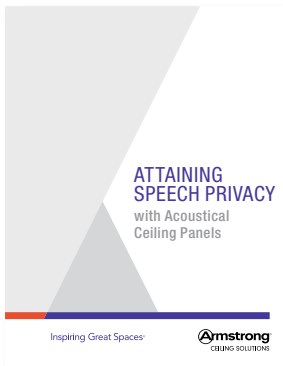


CONFIDENTIAL SPACES

# Putting SOUND BLOCKING to the Test

## The Truth About Sound Blocking

- Total Acoustics® ceilings with a CAC of 35+ tested in real-world scenarios<sup>1</sup> have been proven to deliver confidential speech privacy.
- Ceiling panels with a low CAC (<35) are unable to achieve the sound blocking that Total Acoustics Performance™ offers.



Download the White Paper:  
Attaining Speech Privacy with  
Acoustical Ceiling Panels

## Ceiling CAC – Critical to Speech Privacy

- Real-world independent acoustical testing in common plenum shared offices confirms that high CAC Total Acoustics panels are essential to achieving speech privacy.

<sup>1</sup> Independent Acoustical Measurements and Report by Acentech Inc.

# Why CAC Matters

Confidential  
Speech Privacy  
**NOT  
ACHIEVED**

**NRC 0.90  
CAC 22**

**HIGH NRC  
CEILING PANELS**

Speech Privacy  
Index\* **82%**

\* Privacy Index measurement and calculation  
are defined in ASTM E1130

Confidential  
Speech Privacy  
**ACHIEVED**

**NRC 0.75  
CAC 35**

**ULTIMA®  
CEILING PANELS**

Speech Privacy  
Index\* **97%**



**TOTAL  
ACOUSTICS®**  
Sound Absorption (NRC)  
+ Sound Blocking (CAC)

Field Test Parameters:

- Adjacent Offices (same size)
- Plenum (with no barrier)
- Common Wall (STC 35+)
- Concrete Deck  
(with commercial carpeting)
- Background noise at ASHRAE  
recommended 42 dBA

Total Acoustics®  
ceiling solutions help  
provide confidential  
speech privacy.



Studies show that excessive noise at the office reduces worker effectiveness, raises stress, and lowers employee satisfaction. Today's flexible spaces call for concentration one minute, collaboration the next.

In closed plan areas, noise from open areas plus adjacent spaces can negatively affect confidentiality.

Today's open plan areas can become tomorrow's closed plan areas making both absorption (NRC) and blocking (CAC) important for future space flexibility.

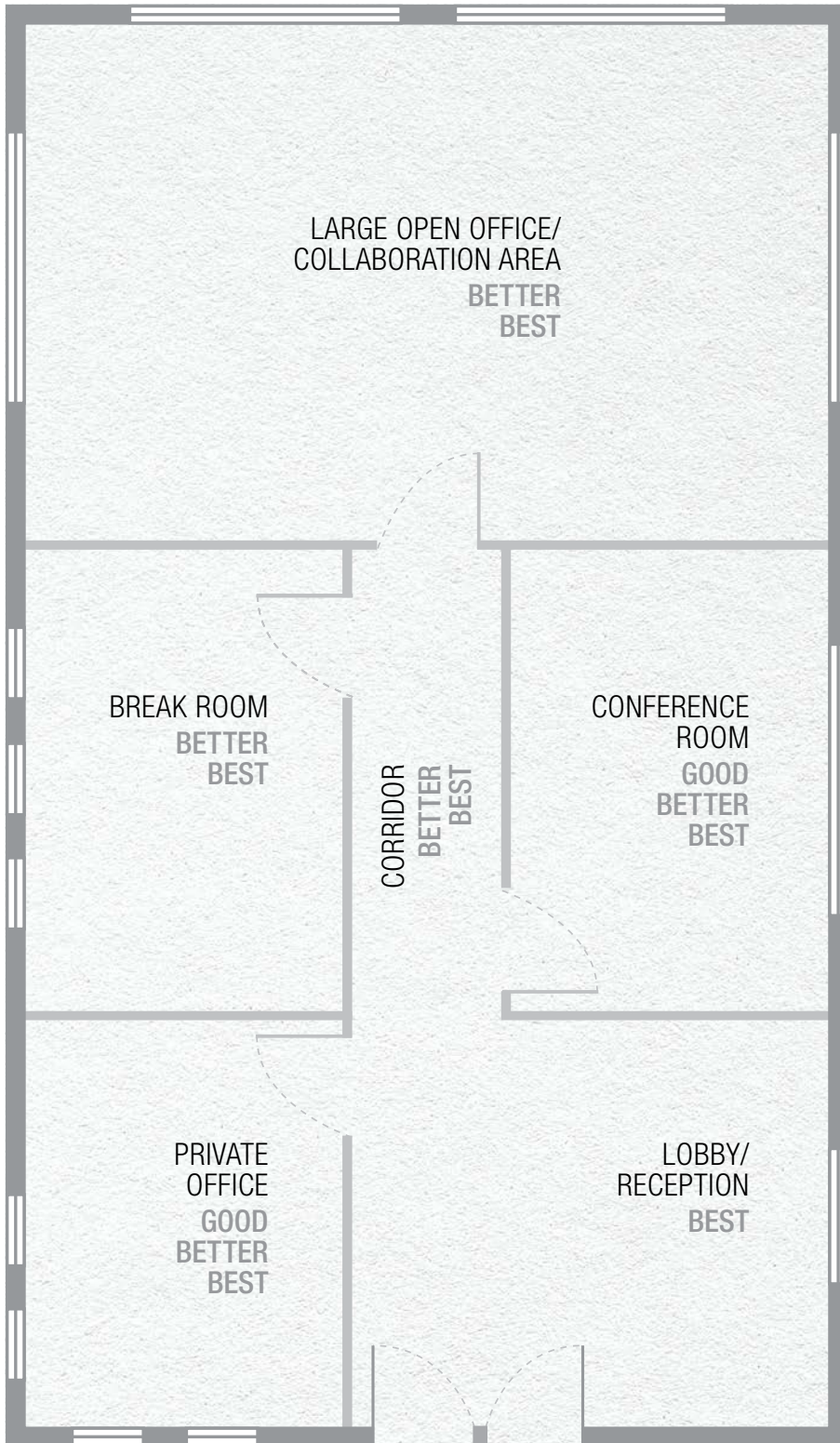
Ceilings with Total Acoustics Performance™ not only address quiet concentration, energetic collaboration, and speech privacy in today's workplace, but everything in between.

# MANAGE Office Buzz

▼ WoodWorks® Grille Tegular 24" x 24" panels with 2820 infill panels







**BEST**

NRC 0.80+ and CAC 35+

High traffic spaces or multipurpose spaces where maximum sound absorption and sound blocking are needed to help keep noise levels down and prevent disruption to adjacent spaces.

**BETTER**

NRC 0.70-0.75 and CAC 35+

Spaces where strong sound absorption and sound blocking are needed for all-around acoustical performance.

**GOOD**

NRC 0.60-0.65 and CAC 35+

Spaces where less sound absorption is required but sound blocking is needed to maintain privacy between adjacent areas.

$$\begin{aligned}
 & \text{NRC} \\
 + & \text{CAC} \\
 = & \text{Total Acoustics} \\
 & \text{Performance}^{\text{TM}}
 \end{aligned}$$



▲ Cirrus® Tegular 24" x 24" panels with Suprafine® 9/16" suspension system

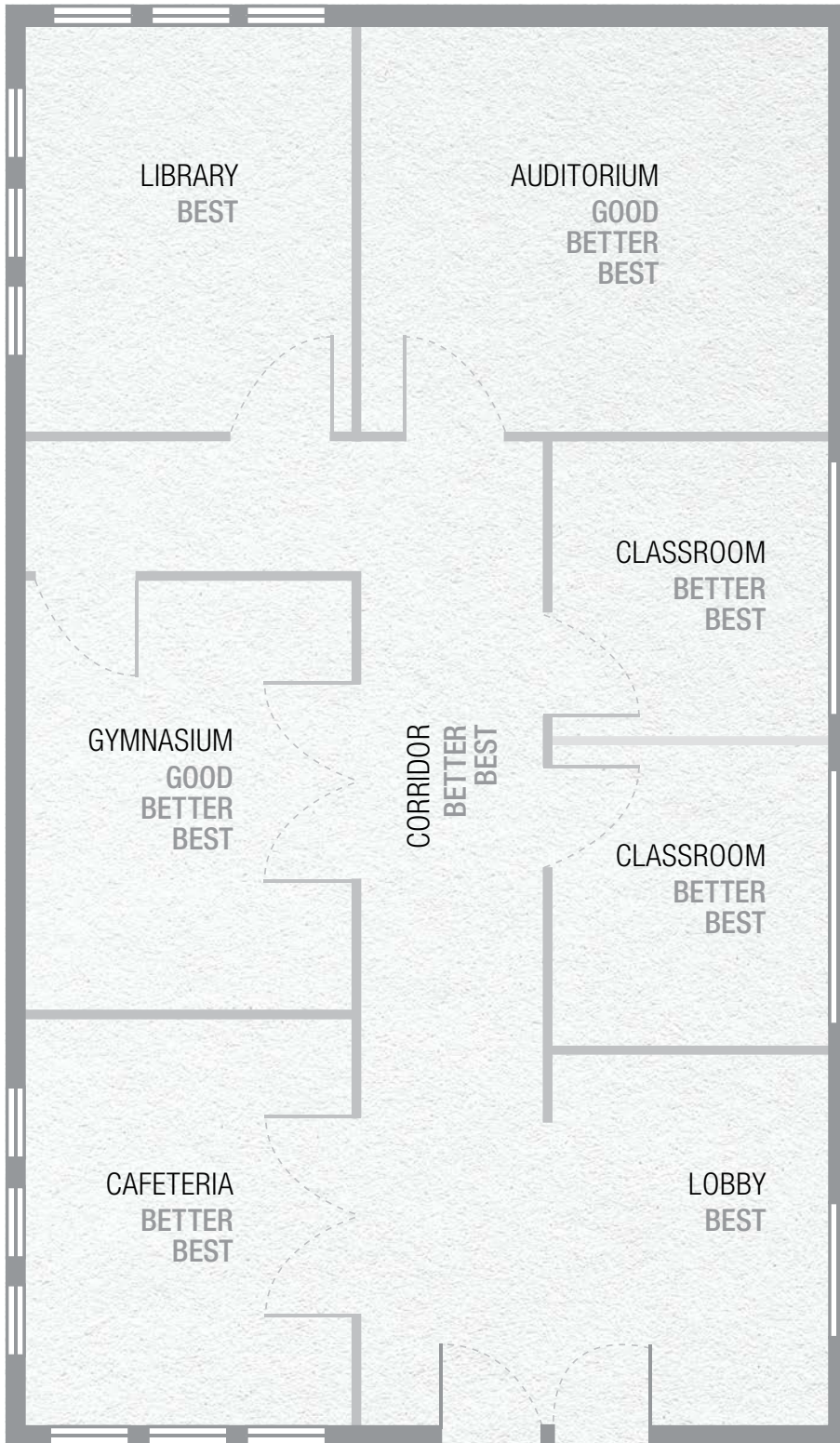
# HUSH Booming Voices

Each day, thousands of students are unable to understand one out of every four spoken words in classrooms due to inadequate ceiling acoustics.

With Total Acoustics® ceiling performance, you'll meet or exceed ANSI standards, contribute to LEED® points, and create a better place for teachers to teach and students to learn.

▼ MetalWorks™ Tegular panels with 2820 infill panels





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NRC  
+ CAC  
= Total Acoustics  
Performance™

# CREATE Peaceful Privacy

Excessive noise in corridors, busy nurses' stations, and chaotic treatment rooms negatively affects patients – as well as interactions between doctors and staff.

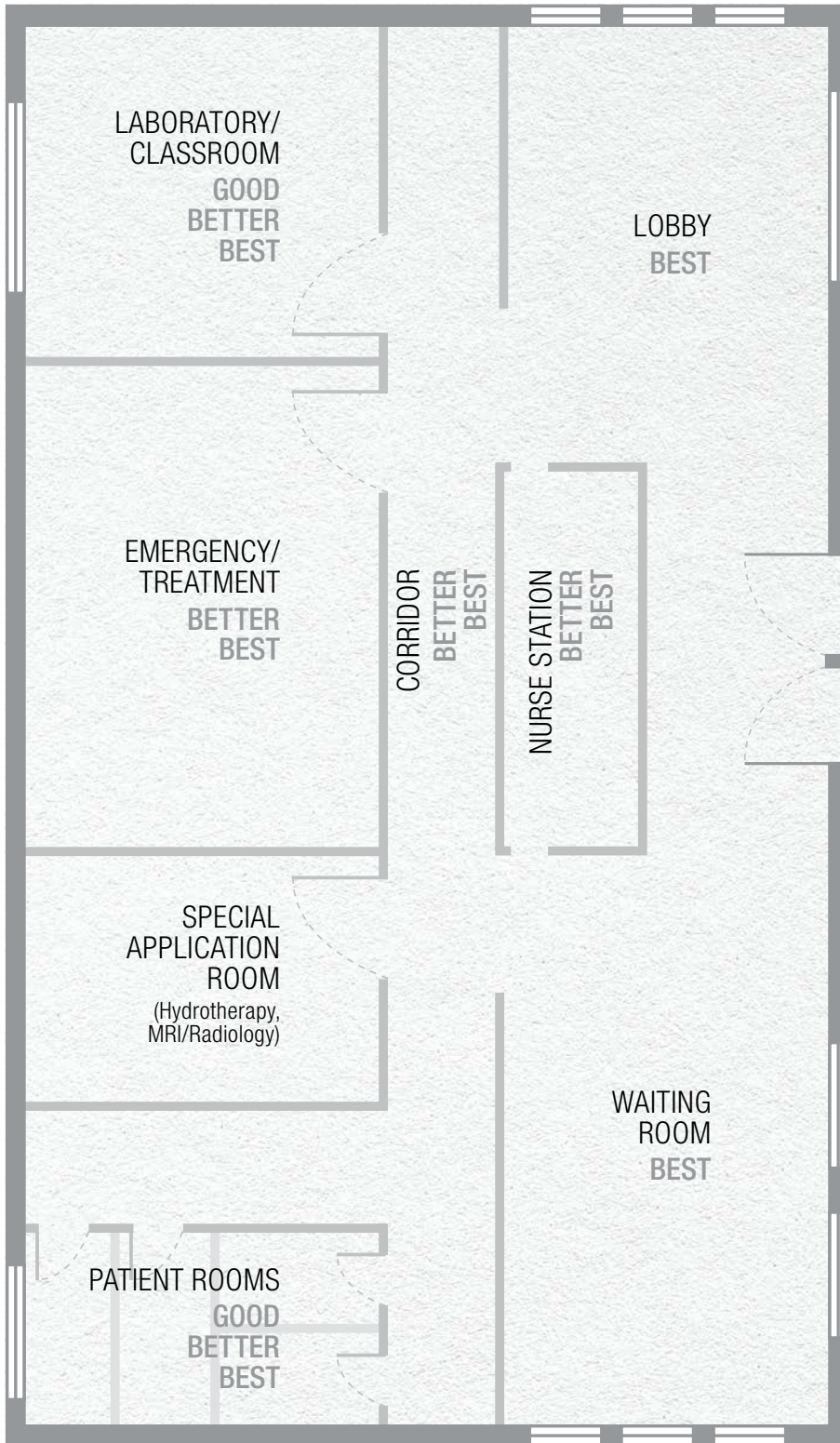
Ceilings with Total Acoustics Performance™ help meet HCAHPS, address HIPAA healthcare requirements, and aid in optimum patient recuperation.



▲ WoodWorks® Channelled Tegrular panels with 2820 infill panels

▼ Ultima® Health Zone™ panels with Silhouette® 1/4" reveal 9/16" suspension system





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Performance™

Our A Ceiling for Every Space® online tool lets you quickly click through installation photos to give you ideas and specific product recommendations.

You'll also be directed to the corresponding Total Acoustics Performance™ information for your product selections.

Try it at:  
[armstrongceilings.com/everspace](http://armstrongceilings.com/everspace)



PLACES TO WORK



PLACES TO LEARN

# CEILING SOLUTIONS for Every Space



▲ Calla® Colorations® panels with Silhouette® XL® 9/16" suspension system in custom colors and Axiom® Classic custom curved trim in White



PLACES TO HEAL



PLACES TO PLAY



PLACES TO GO

Our TechLine service team can provide you with technical support for acoustic code compliance of ceilings with Total Acoustics Performance™:

- HIPAA, HCAHPS, ANSI
- Custom reverberation and privacy index calculation reports based on your project design

Contact us to find out more:  
 1 877 276-7876  
 Fax 1 800-572-TECH  
 techline@armstrongceilings.com  
 8 a.m. to 5:30 p.m. EST

## TechLine

# TAKE THE NEXT STEP

## 1 877 276-7876

Customer Service Representatives  
7:45 a.m. to 5:00 p.m. EST  
Monday through Friday

**TechLine** – Custom reverberation and privacy index calculation reports, technical information, detail drawings, CAD design assistance, installation information, other technical services – 8 a.m. to 5:30 p.m. EST, Monday through Friday. FAX 1 800 572 8324 or email: [techline@armstrongceilings.com](mailto:techline@armstrongceilings.com)

## [armstrongceilings.com/commercial](http://armstrongceilings.com/commercial)

 CEU – Acoustical Design for Today's Buildings

 CEU – A New World of Acoustics

Reverberation Time Calculator

Total Acoustics® Ceilings Case Studies

Latest product news

Standard and custom product information

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CAD, Revit®, SketchUp™ files

A Ceiling for Every Space® Visual Selection Tool

Product literature and samples – express service or regular delivery

Contacts – reps, where to buy, who will install

## YOU INSPIRE™ SOLUTIONS CENTER

1 800 988 2585  
email: [solutionscenter@armstrongceilings.com](mailto:solutionscenter@armstrongceilings.com)  
[armstrongceilings.com/youinspire](http://armstrongceilings.com/youinspire)

### Design Assistance

Collaborative design

Detail drawings

Specifications

Planning and budgeting

### Pre-construction Assistance

Layout drawings for standard and premium products

Project installation recommendations

Contractor installation assistance

**you inspire™**  
solutions center

helping to bring your one-of-a-kind ideas to life

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