

LUNCH AND LEARN | 1 HOUR



Quiet Is Not Private

Speech Privacy and Sound Masking in Banks and Financial Services

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Course Description

Branch and office design has shifted toward open lobbies, universal banker pods and glass-fronted offices, and those welcoming spaces make customer financial conversations easier to overhear. This course explains speech privacy as a relationship between speech and background sound, introduces the Absorb, Block, Cover framework and its ratings, and applies them space by space to banks, credit unions and advisory offices. Participants will learn where speech leaks, how design supports safeguarding obligations under GLBA and related rules, and where fixed and adaptive sound masking help or do not belong.



AUDIENCE

Architects, interior designers,
engineers, owners



LEVEL

Introductory to intermediate



FOCUS

Banks, credit unions, advisory and
lending offices

Learning Objectives



Explain why speech privacy depends on the relationship between speech level and background sound, and why quiet, modern spaces are often less private.



Apply the Absorb, Block, Cover framework and interpret the ratings behind it (NRC, AC, STC, SPC, Privacy Index) to protect occupant well-being.



Identify where customer financial conversations leak in branches and advisory offices, and select design strategies that support GLBA safeguarding and customer trust.



Evaluate where fixed and adaptive sound masking should and should not be used in financial spaces, accounting for glass offices, recorded lines and life safety.

Our Hour Together

Part 1

How Speech Privacy Works

Signal and background, the ABCs, the ratings, and how masking is tuned

25 min

Part 2

Financial Services, Space by Space

Rules, branch privacy zones, where speech leaks, and the quick fix for each space

25 min

Wrap Up

Takeaways and Questions

Design meeting questions and open Q&A

10 min

PART 1

How Speech Privacy Works

The physics, the tools, and the numbers behind them

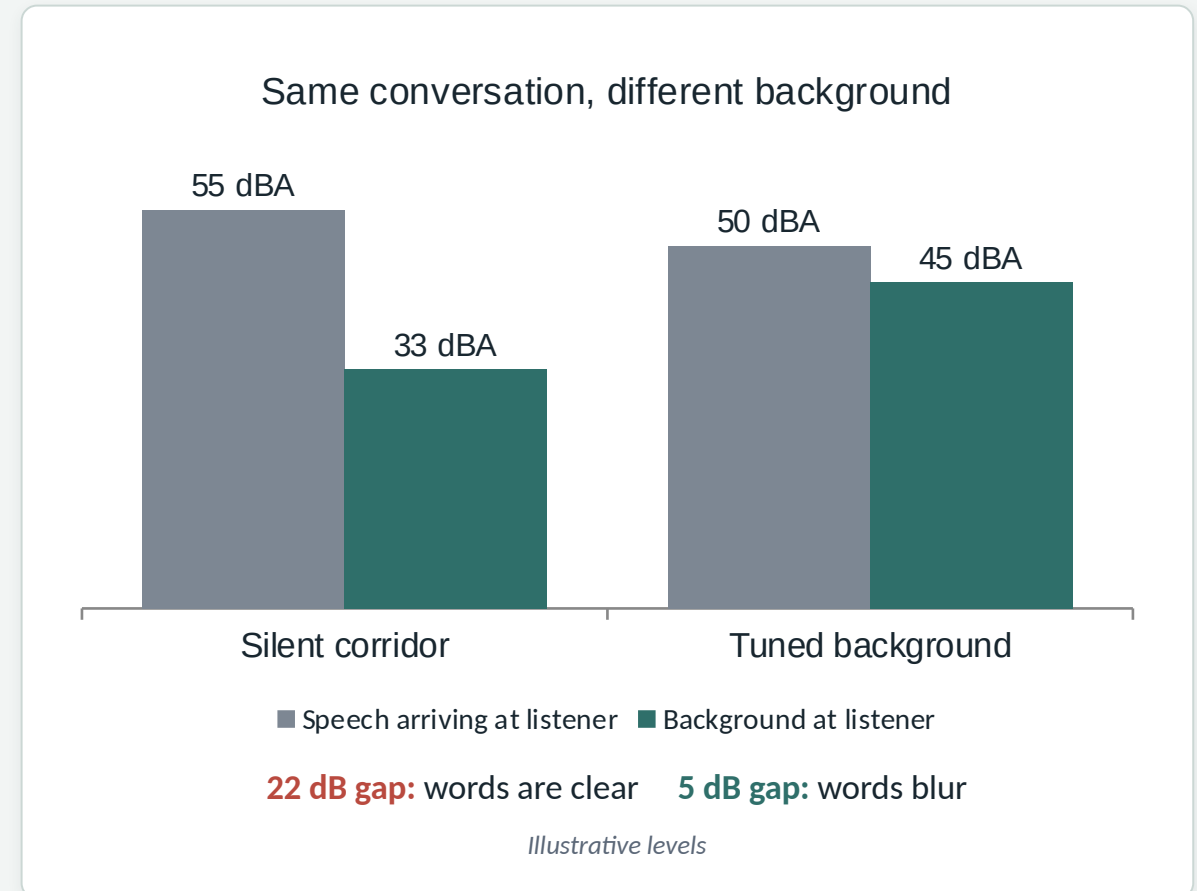
Quiet Is Not Private

Privacy comes down to one relationship at the listener's ear:

- How loud is the conversation when it arrives?
- How loud is the background where the listener stands?

When speech rises well above the background, the listener understands it. When the background is close to the speech, the words blur into sound the brain stops decoding.

Two ways to improve privacy: reduce the speech that arrives, or raise the background in a controlled, comfortable way.



What Changed in the Buildings We Design



Open plans

Fewer walls, more shared and flexible space.



More glass

Visual connection, with acoustic leaks at joints and doors.



Quieter buildings

Efficient HVAC and equipment removed the old background sound.



Higher expectations

Customers expect account and loan talk to stay private.

Each is a good design decision. Together, they let speech travel further and stand out more.

Conversations Are Information

The question is not "Can someone hear something?"

It is "Can someone understand something they were never meant to hear?"



Financial

Balances, loans, estates,
fraud cases



Legal

Privileged strategy and
client matters



Healthcare

Names, diagnoses,
medications



Corporate

HR issues, strategy,
customer data

What the Research Shows

~50% vs 18%

of open-plan occupants dissatisfied with sound privacy, compared with people in private offices

42,764 survey responses from 303 office buildings. The "ease of interaction" open plans promise did not make up for the lost privacy.

Kim and de Dear, Journal of Environmental Psychology, 2013

40% fewer

attempts at an unsolvable puzzle after three hours of low-level open-office noise

Stress hormone levels rose. The workers did not report feeling more stressed. The noise cost them without their noticing.

Evans and Johnson, Cornell University, Journal of Applied Psychology, 2000

Speaking the Language of Sound



Decibel

A logarithmic scale. About +10 dB sounds twice as loud. A 3 dB change is just noticeable.



A-weighted level

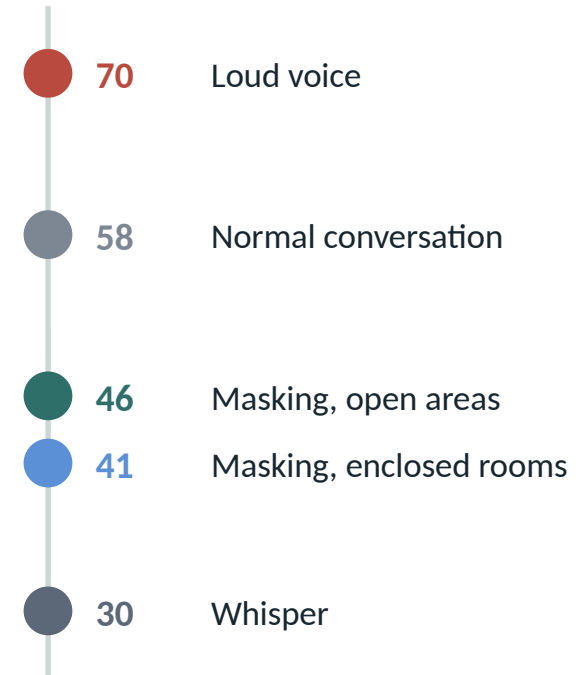
One number weighted the way human hearing responds. Masking is specified in dBA.



One-third octave bands

The frequency slices of a sound. One dBA number can hide a harsh or rumble spectrum.

Typical levels (dBA)



Masking values from GSA Sound Matters targets. Conversation and whisper levels are typical approximations and vary with distance and effort.

Privacy Is Not One Thing

Freedom from distraction

Nearby conversations stop pulling attention. Some speech may still be understood.

Open work areas, lobbies

Normal privacy

You can tell someone is talking and may catch a word, but can't follow it without effort.

Offices, service points

Confidential privacy

Conversations are essentially unintelligible to anyone outside the group.

Closed consult rooms

Speech security

Information is protected by regulation or contract; a motivated listener may try to overhear.

Secure and accredited spaces

How Privacy Is Measured

Open plan spaces: ASTM E1130

Rating	Articulation Index	Privacy Index
Confidential	0.05 or less	95% or more
Normal	0.20 or less	80% or more
Poor	Above 0.20	Below 80%



A Privacy Index of 80% is normal privacy, not confidential. That distinction trips up a lot of marketing material.

Closed rooms: ASTM E2638, Speech Privacy Class

SPC	Category	A listener outside can expect
70	Minimal privacy	Speech frequently intelligible
75	Standard privacy	Occasionally intelligible
80	Speech security	Very rarely intelligible
85	High security	Essentially unintelligible
90	Very high security	Unintelligible, essentially inaudible

SPC adds the room's level reduction to the background outside, so it captures the speech-to-background idea directly.

SPC categories per Gover and Bradley, National Research Council Canada. Other SPC tables use different listener assumptions; name the table you cite.

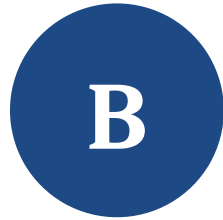
The ABCs of Speech Privacy



Absorb

Reduce the speech that reflects off ceilings and hard surfaces toward a neighbor.

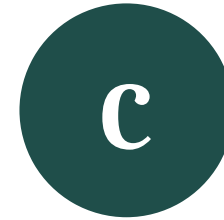
Ceilings, wall panels, soft finishes



Block

Stop sound from passing between spaces, and seal the paths around the barrier.

Walls, doors, glass, plenum barriers, seals



Cover

Raise the background at the listener with a tuned, comfortable masking sound.

Engineered sound masking

Take away any one and privacy drops, because each tool covers a gap the others leave. (The framework behind GSA's Sound Matters guidance.)

Absorb: Start With the Ceiling



Where absorption does the most good

The ceiling first. It is the largest surface and the main reflection path. GSA calls for NRC 0.90 or higher over open office ceilings.

Ask for AC in open plans. Articulation Class describes how well a ceiling limits speech reflected between workstations.

Walls at speaking height in meeting rooms, glass offices and corridors.

Branch lobbies: stone and glass look great; add absorption overhead so the lobby does not amplify every conversation.



Absorption traps

Treating NRC as the whole story. Ask for the full coefficient table.

Foam finishes without fire testing. Foam plastics typically need NFPA 286 room-corner testing under the IBC.

Expecting it to stop sound through walls. That is blocking.

Over-treating. A room that is too dead makes people raise their voices.

Block: The Weak Links Decide



Doors

Undercut or ungasketed doors are often the weakest element in the room.



Walls that stop at the ceiling

Sound goes up, across the plenum, and down next door.



Ducts and transfer grilles

Shared returns act like speaking tubes.



Glass and mullions

Gaps at joints and doors rarely match the adjoining wall.

STC is a lab number. Rooms perform in the field.

Partition STC	Typical experience next door
25 to 30	Speech easily understood
35 to 45	Loud speech audible, less clear
50 to 55	Normal speech generally private
60 to 65	Loud sounds barely audible

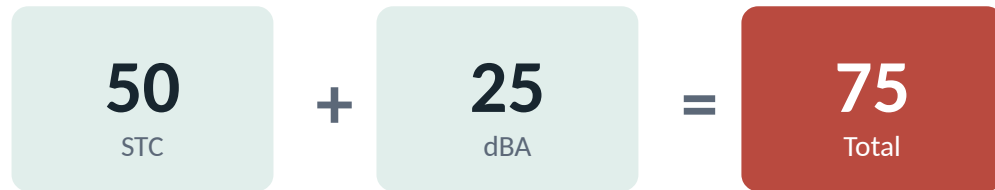
Descriptions assume a quiet background and a well-built room. Field ratings (ASTC, NIC) often land several points below lab STC once flanking paths are included.

STC descriptions adapted from Riverbank Acoustical Laboratories guidance. STC per ASTM E90 and E413; field ratings per ASTM E336.

Why Blocking and Covering Work as a Team

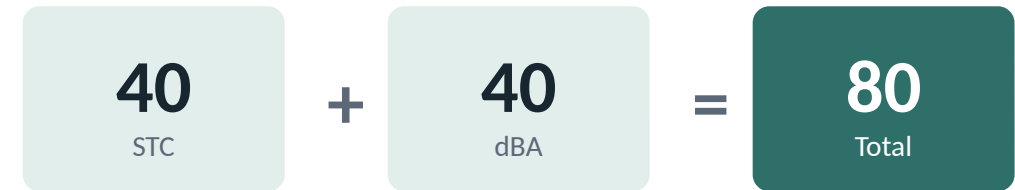
Wall STC + Background dBA at the listener ≈ 75 for basic speech privacy

An expensive wall, a silent corridor



Barely reaches the target. Any leak at the door or plenum and it falls short.

A standard wall, a tuned background



Beats the heavier wall, and the corridor background protects every room along it.

A consultant rule of thumb for screening, not a design method. It ignores flanking paths; critical rooms need a design and field test.

Cover: What Sound Masking Is, and Is Not



Sound masking is

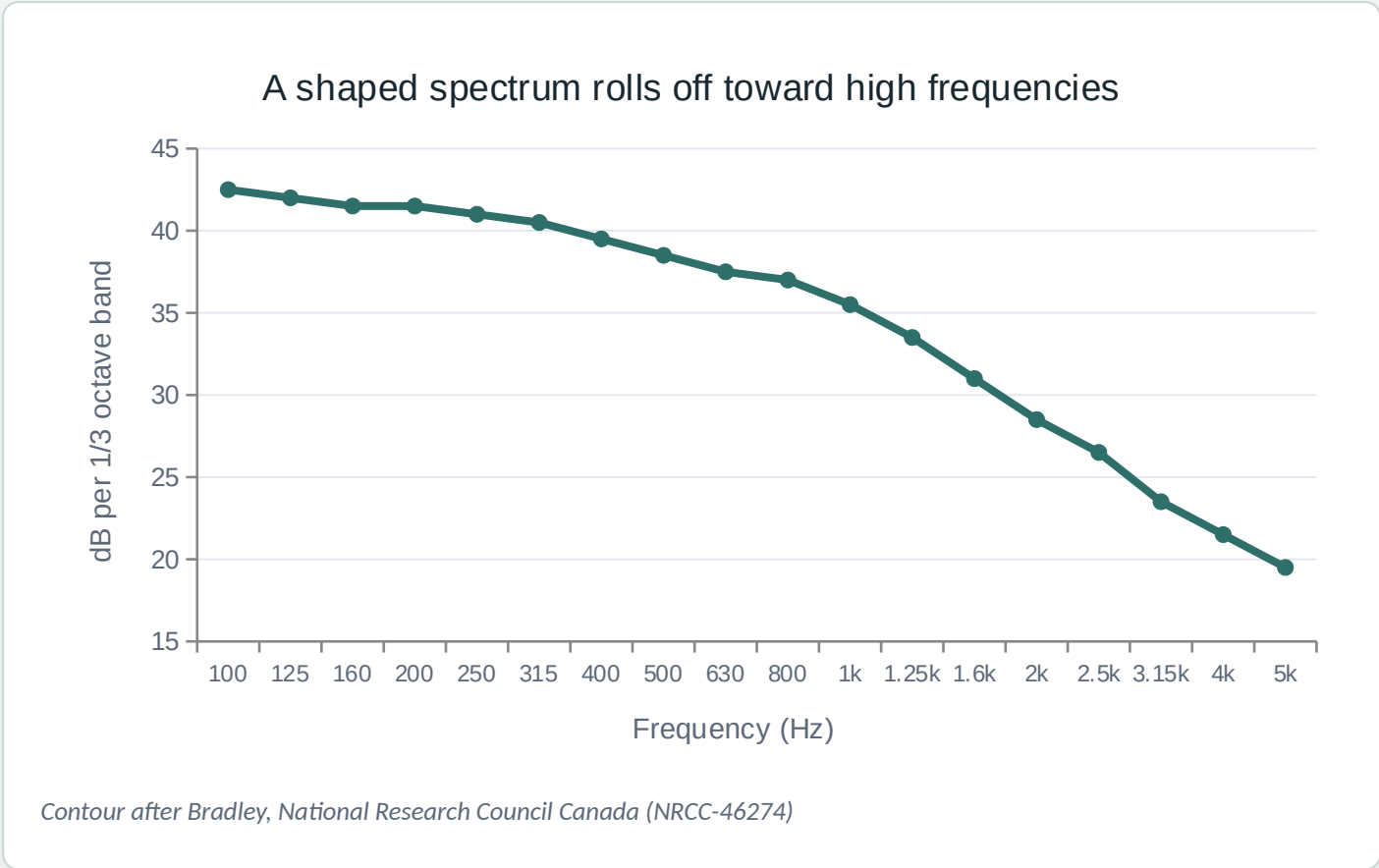
- An engineered background sound played through a network of speakers
- Shaped across frequency bands to cover the sounds that carry speech
- Tuned zone by zone and measured (ASTM E1573)
- Heard as soft, even airflow when done well
- A way to shrink the distance at which speech is understood



Sound masking is not

- White noise, which is harsh and hissy at privacy levels
- A way to reduce echo or reverberation (it adds sound)
- A replacement for walls, doors and seals
- A fix for loud or tonal HVAC noise
- Confidential privacy in an open plan on its own

Tuned, Not Just Turned On



Typical design targets

45 to 48 dBA

Open work areas

40 to 42 dBA

Enclosed offices

Tuned on site

Lobbies, teller lines and the lobby side of glass offices

Specify tolerances for overall level and each band, zone by zone, and verify by measurement. An average that hides quiet spots leaves privacy holes.

Open and enclosed targets from GSA Sound Matters. Measurement and reporting per ASTM E1573.

Where Masking Should Not Go, or Needs Great Care



Classrooms and lecture rooms

ANSI/ASA S12.60 limits classroom background noise to 35 dBA so students can hear. Mask the offices instead.



Recorded lines and video banking studios

Keep levels in check where calls are recorded or advisors meet clients on camera.



Conference, video and courtrooms

People inside need clear speech and microphones pick up masking. Mask the corridor outside.



Anywhere life safety depends on hearing

Masking, music and paging should mute when the fire alarm or mass notification activates.



Spaces for people with hearing loss

Added background sound can make conversation harder: senior living common areas, audiology suites.

Rule of thumb: put masking where the listener is, not inside the room you are trying to protect.

Design It, Tune It, Measure It

Plenum-mounted

Speakers above a suspended ceiling; the plenum and tiles diffuse the sound. Hardware stays hidden, but results depend on plenum depth, obstructions and tile performance.

Direct-field

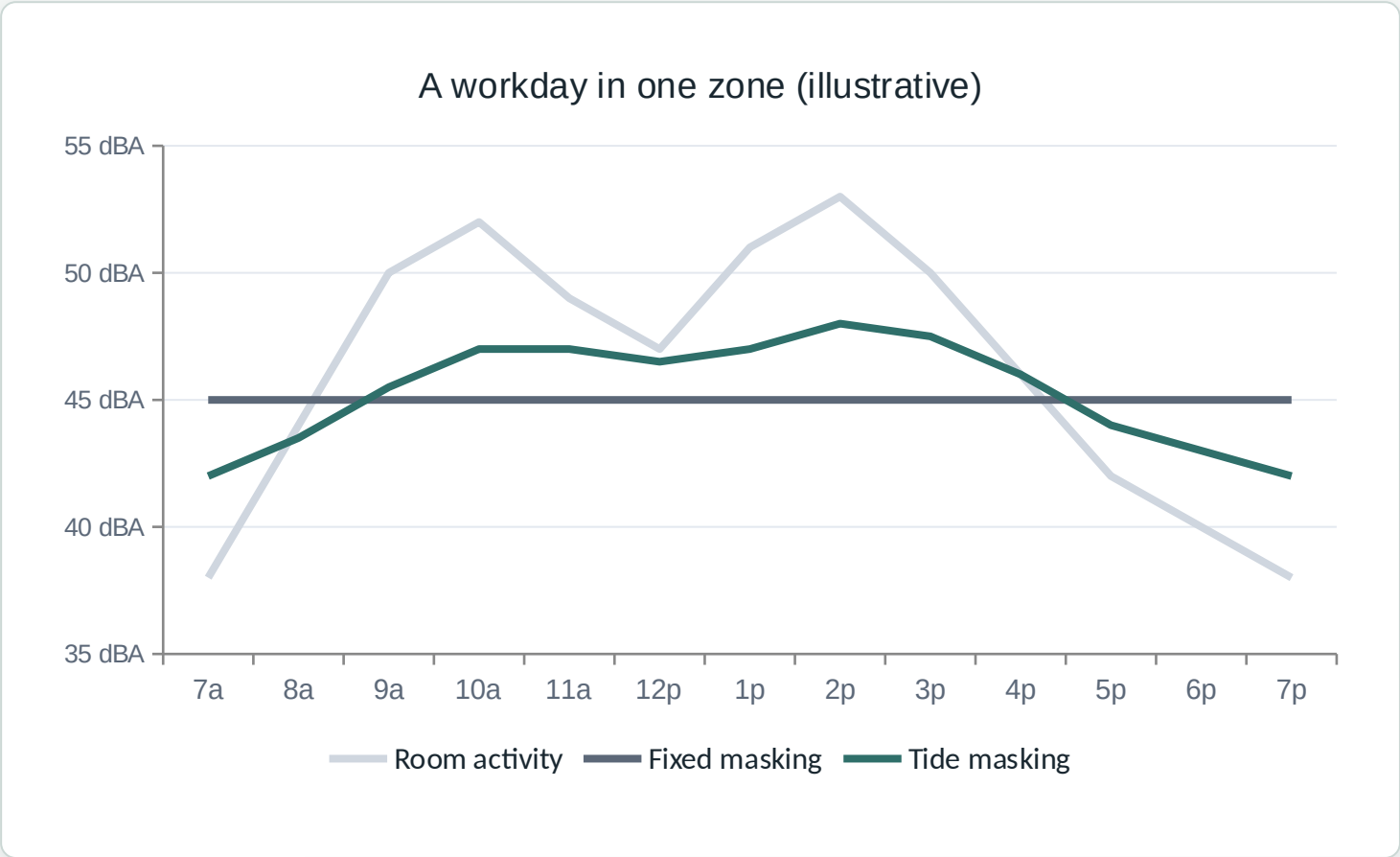
Small speakers in or on the ceiling plane facing into the space. Generally more uniform and controllable, and works with open ceilings, with visible devices.

The right choice depends on the ceiling, architecture, budget and the uniformity required.

Commissioning checklist

- ✓ Measure the background with masking off, so everyone knows what HVAC contributes
- ✓ Tune each zone to the target spectrum, not just the dBA number
- ✓ Check uniformity near walls, columns and transitions
- ✓ Listen: if you can locate a speaker by ear, adjust
- ✓ Ramp up gradually over days or weeks in occupied spaces
- ✓ Document by zone and revisit after occupancy

The Tide Principle



Quiet morning

Settles low, so no one notices it.



Busy afternoon

Rises so conversations stay covered.



Always in bounds

Inside set limits, changing too slowly to hear.

Getting the Tide Right



Sense each zone

Sensors measure ambient conditions where people actually are, not one reading for the whole floor.



Set the shoreline

A floor and a ceiling around the design target, for example 42 to 48 dBA around 45.



Move slowly

Changes of a small fraction of a decibel per second, so occupants never hear a shift.



Verify and log

Measure it like any fixed system, and keep a history to see how zones behave over time.



Done poorly, a system that chases every noise becomes the distraction. Clear limits and slow rates are what make it disappear.

The Most Expensive Myths



"Quiet is private."



Silence makes speech easier to understand.



"Masking is just white noise."



It is a shaped, tuned, measured spectrum.



"Masking reduces echo."



Reverberation is controlled with absorption.



"We'll just use the HVAC."



It varies with load, has the wrong spectrum and often tones.



"STC 50 walls guarantee privacy."



Not with an undercut door, a shared plenum and a silent corridor.



"Privacy Index 80% is confidential."



Under ASTM E1130, 80% is normal. Confidential is 95%.

PART 2

Financial Services, Space by Space

Branches, credit unions and advisory offices: what is at stake, where speech leaks, and the quick fix

Two Jobs: Protect Customer Information, Protect Trust



Safeguarding

Gramm-Leach-Bliley Act (GLBA)

Requires financial institutions to protect the security and confidentiality of customer information. Banks follow the interagency safeguards guidelines; many non-bank lenders and advisors follow the FTC Safeguards Rule.

SEC Regulation S-P amendments

Broker-dealers, advisers and funds must have incident response programs and notify affected customers. Compliance began December 2025 for larger firms and June 2026 for smaller ones.



Trust

Branch design changed

Teller lines gave way to open universal banker pods and glass offices along the lobby. Welcoming, and much easier to overhear.

Customers notice

Nobody needs a regulation to draw a conclusion after overhearing another customer's balance or loan denial.

GLBA (15 U.S.C. 6801); FTC Safeguards Rule (16 CFR Part 314); SEC Regulation S-P. Confirm which rules apply to your client.

Financial Privacy Rules and Acoustics: The Straight Facts



What the rules do

- Require a written information security program with administrative, technical and physical safeguards
- Include physical access controls to customer information (FTC Safeguards Rule)
- Require incident response and customer notification for covered SEC firms (Reg S-P)



What they do not do

- Set decibel levels, wall ratings or any acoustic metric
- Certify any product as making a branch "compliant"
- Make a conversation in an open pod confidential

Good acoustics is one reasonable physical safeguard. Frame it as protecting customers, not as a compliance checkbox.

Designing the Modern Branch in Three Privacy Zones



Public zone

Lobby, queue, seating, self-service

Goal: freedom from distraction

- Absorb overhead so the lobby does not amplify voices
- Masking over seating and queue so the next customer is not the audience
- Music on its own zone, never as privacy



Assisted zone

Teller line, universal banker pods

Goal: normal privacy

- Distance and orientation between positions
- Partial screens where layout allows
- Masking centered on the transaction points



Private zone

Advisor offices, wealth and loan rooms

Goal: confidential privacy

- Walls to deck, sealed doors, tested glass
- No open transoms over glass doors
- Masking in the lobby side of every glass front

Most common failure: selling an open pod as private. Three feet from another customer is not confidential.

Anatomy of a Branch: Where Speech Leaks



Simplified composite plan for discussion

Character, Flaw and Quick Fix

Space	Character	The flaw	Quick fix
1 Teller line	Transactions at a counter with a queue a few feet behind	Names, balances and account numbers carry straight to the next customer	Queue set back from the counter, absorption overhead, masking centered on the transaction points
2 Universal banker pods	Open or partially screened desks in the lobby	Sold as private, but three feet from other customers	Distance and orientation between pods, partial screens, masking over the pod area; sensitive topics move to an office
3 Glass advisor offices	Glass fronts along the lobby, often with a sliding or transom door	Leaks at mullions, door gaps and the open transom	Tested glass with sealed joints, walls to deck, no open transom, masking on the lobby side
4 Wealth conference room	Long, detailed conversations about estates and portfolios	Walls to the ceiling only and a shared plenum with the next office	Walls to deck or plenum barrier, gasketed door, absorptive finishes inside, mask the adjoining corridor

Character, Flaw and Quick Fix

Space	Character	The flaw	Quick fix
5 Waiting and lobby seating	Customers sit and wait near every other space	Silent lobby makes them the audience; music is inconsistent cover	Masking over seating with music on its own zone; absorption overhead
6 Drive-up and ITM audio	Speakers and video tellers near public areas	Remote teller audio broadcasts into the lobby or vestibule	Locate and aim speakers away from public areas, set volumes, handset or privacy screens where possible
7 Loan and mortgage closing	Income, credit history and family finances discussed at length	Often a converted office with an undercut door	Solid gasketed door, sealed penetrations, masking in the corridor outside
8 Operations and call center	Staff on phones with account details all day	Voices carry into offices and near visitor paths	High-AC ceiling, panel absorption, masking tuned for headset work, separation from public areas

The Tide in a Branch: A Day at the Counter



9 am doors open

The first rush fills the lobby; masking rises to cover the line.



Lunch and after-work peaks

Holds near its upper limit while the queue is longest.



Quiet afternoon

Settles back so the lobby feels calm, never louder than needed.

The Quick Recipe for Financial Services Speech Privacy



Map the conversations

Where do customers share account, loan and identity details, and who can hear from the queue?



Absorb

Overhead absorption in the lobby, teller line and pod area.



Block

Advisor and closing rooms: walls to deck, tested glass, sealed doors, no open transoms.



Cover

Masking over the queue, seating, pods, and the lobby side of glass offices.



Let it tide

Adaptive masking with set limits where lobby activity swings over the day.



Integrate and verify

Separate music and masking zones, mute on fire alarm, measure per ASTM E1573.

Traps We See in Financial Services Projects



Believing an open pod is confidential

Masking helps, but a conversation three feet from another customer is not confidential. Give it a room.



Using lobby music as privacy

Music has gaps and level changes. It belongs on its own zone, on top of consistent masking.



Forgetting the drive-up and ITM speakers

Remote teller audio can broadcast account details into public areas.



Selling "GLBA compliance"

The rules do not set acoustic requirements. Frame acoustics as a physical safeguard and a customer experience.

From the Field: A Regional Bank and an Advisory Team



The situation

A small regional bank's teller conversations carried across the lobby. Separately, a financial services firm needed to protect client details discussed in open-office team huddles.

The change

Masking was zoned and tuned for the teller line, lobby and the open advisory areas, and brought up gradually.

The result

"They did not talk about decibels. The bank said the branch simply felt more professional, and the advisory team kept its open layout with a layer of privacy clients noticed."

WORTH KNOWING

Glass is rarely the weak link

When a glass office fails, the problem is usually the mullions, the gap under a sliding door, or an open transom above it. Tested glass systems with sealed joints and walls to the deck do more than thicker glass alone.

Ask for tested ratings for the complete front, not just the glass.

Questions for Your Next Financial Services Design Meeting



Where do customers share account, loan and identity details, and who can hear them from the queue or seating?



Are banker pods being sold as private, and where do sensitive conversations go instead?



Do advisor office fronts have tested glass, sealed doors and no open transoms?



Will masking and music be on separate, controllable zones?



Where do the drive-up and interactive teller speakers project their audio?



Which zones swing enough over the day to tide, and who will measure results after opening?

Key Takeaways



Quiet is not private

Privacy is the relationship between the speech that arrives and the background at the listener.



Use all three tools

Absorb, Block and Cover work as a system, and the ratings tell you whether they are working.



Know where the branch leaks

The teller line, pods and glass offices need attention first.



Mask where the listener is, and let it tide

Masking over queues and the lobby side of glass offices, rising and settling with the banking day.

Questions?

Thank you for spending the hour with us.

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LET'S TALK

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Email Alex

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Book a lunch and learn for your team.