

Winterizing Your Campus

A facilities field guide for Central Texas school districts

Maintenance · Custodial · Grounds · Campus Supervision



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TIER 0

TIER 1

TIER 2

TIER 3

Our buildings were designed for August

Designed for cooling

Central Texas schools are engineered around 100°F design days. Heating capacity is normal, freeze protection is there, but hard or long freezes require owner action, which can be forgotten about.

Pipes in cold places

Domestic water and sprinkler mains can run through unconditioned spaces, in older building attics, typically in mechanical room or maintenance spaces or canopy attic cavities.

Not always routine.

A Minnesota custodian winterizes every October out of habit. Our crews do it once every few years, often under a FREEZE forecast that changed twice in twenty-four hours.

February 2021 was not a hundred-year event.

Central Texas districts saw hard freezes in 2021, 2022, and 2024. Plan for a multi-day freeze as a normal operating condition, not an emergency you improvise through.

Takeaway: The building will not protect itself. Everything that works in a freeze here, somebody did on purpose.

What one burst pipe actually costs

One 2-inch line, one library ceiling

A domestic water line in an attic freezes and splits during a holiday break. It thaws days later, unnoticed, and runs until the next scheduled walk-through finds it. Water finds the library, two classrooms, and the IDF closet below.

Nobody was doing anything wrong. Nobody was there.

WEEKS

Classrooms out of service during remediation and rebuild

\$\$\$\$ +

Typical loss for water through a ceiling into finished space

DAYS

Wet drywall and insulation can start to become a mold problem

Insurance covers accidents. It argues about neglect.

A signed pre-event checklist is the cheapest document your district will ever produce. It is the difference between a covered claim and a long conversation about whether reasonable measures were taken.

Takeaway: The cost of prevention is a few hours of labor. The cost of one failure is a wing of the building.

Freeze damage lives in the gaps

Maintenance trades (M-E-P)

Mechanical rooms, boilers and chillers, heat trace circuits, shutoff valves, hose-bibbs, out buildings.

Custodial

Interior walks, drip protocols, doors and thresholds, reporting what looks wrong at 6 a.m.

Grounds

Irrigation and backflow, hose bibbs, ice control on walks and bus loops, tree and drainage clearing.

Contracted and vendor

Fire sprinkler inspection, controls and BAS programming, roofing, generator service, any 3rd party managed maintenance.

Three questions to answer before the first cold front

- 1 Who walks each campus, and who signs the pre-event checklist when it is done?
- 2 Who has authority at 2 a.m. to call a vendor, open a building, or wake someone up?
- 3 Who is responsible for the portables, the field house, and the bus barn? These are the buildings that fall between org charts.

Takeaway: Every freeze failure has a person who assumed somebody else had it.

Four tiers, one decision rule

Check the forecast. Find your tier. Work that list. Every item in this presentation is tagged.

0

Complete by November 1

SEASONAL PREP

Anything that needs a part, a work order, a vendor, or a purchase order. If it is not done by November 1 it will not be done in time.

1

Below 32°F overnight

PROTECT

Routine protective actions taken 24 hours ahead. Disconnect, cover, verify, close. One crew, one shift.

2

Below 28°F, or 12+ hrs freezing

ESCALATE

Drip protocols start, overnight staffing decision gets made, vendors get put on notice. Walks happen twice.

3

Below 20°F, multi-day, grid stress

FULL RESPONSE

Drain-downs, generators staged, continuous campus rotation, closure and shelter coordination with the district staff.

Takeaway: Tiers stack. At Tier 3 you are doing everything in Tiers 0, 1, and 2 as well.

SECTION ONE

Site and Grounds

Everything outside the walls freezes first, and almost nothing out here is monitored. Irrigation backflow preventers alone often account for as much Central Texas campus freeze damage as any mechanical system.

TIER 0

TIER 1

TIER 2

TIER 3

Irrigation and exterior water

TIER 0

Complete by November 1

- **Insulate and drain the backflow preventer**

The single most common freeze failure on a school campus. Above-grade assembly, no insulation, full exposure. Install an insulated enclosure or wrap, and confirm the assembly actually drains.

- **Shut off and drain the irrigation mainline**

Blow out heads in zones that will not gravity drain. Disable controller schedules so the system does not water a sheet of ice onto a bus loop at 5 a.m.

- **Verify rain and freeze sensors are wired, not just mounted**

A sensor hanging off a wall with a cut lead is worse than no sensor, because somebody believes it is working.

TIER 1

Forecast below 32°F overnight

- **Disconnect every hose from every bibb**

A connected hose defeats a frost-proof hydrant completely. Water cannot drain back past the seat, the pipe splits inside the wall, and nobody finds it until March.

TIER 2

Below 28°F, or 12+ hours freezing

- **Install insulated covers on exposed bibbs and hydrants**

Concession stands, field houses, ag barns, and portables first. Longest exposed runs, fewest people walking past them. Drain out-buildings if possible, especially if not consistently used over cold months.

Takeaway: Irrigation and hose bibbs cause more campus freeze damage than mechanical equipment does.

Ice control, drainage, and portables

TIER 0

Complete by November 1

- **Inspect tree limbs over roofs, walks, and power service**

Ice load and wind take limbs that were already compromised. Trim before the season, not with a bucket truck in sleet.

- **Clear site inlets, area drains, gutters, and downspouts**

Blocked drainage puts meltwater at building entries and foundations, where it refreezes into a liability.

- **Check portable skirting, underfloor insulation, and heat trace**

Portables are the highest-risk structure on most campuses. Exposed underfloor plumbing, independent systems, and often no heat over a break.

TIER 1

Forecast below 32°F overnight

- **Stage ice melt before the event, not after**

Pre-identify shaded north walks, metal ramps, and stair nosings that ice first. Confirm the product will not damage concrete or get tracked in and ruin gym floors.

- **Verify access to mechanical yards and fenced enclosures**

Crew needs to reach equipment at 5 a.m. in the dark. A frozen padlock is a two-hour delay.

TIER 2

Below 28°F, or 12+ hours freezing

- **Check fuel: generators, fleet, grounds equipment, kitchen propane**

Diesel gels. Block heaters and batteries fail on the coldest morning of the year, which is exactly when you need the truck. Especially important for equipment and vehicles that aren't used frequently that may have a summer blend still in the tank.

Takeaway: The portables and the bus loop are where people get hurt and where nobody is looking.

SECTION TWO

The Building Envelope

The envelope decides which pipes stay above freezing. Most of what fails here is not damage, it is a gap somebody left open: a displaced batt of attic insulation, a stuck outside air damper, a door that no longer closes.

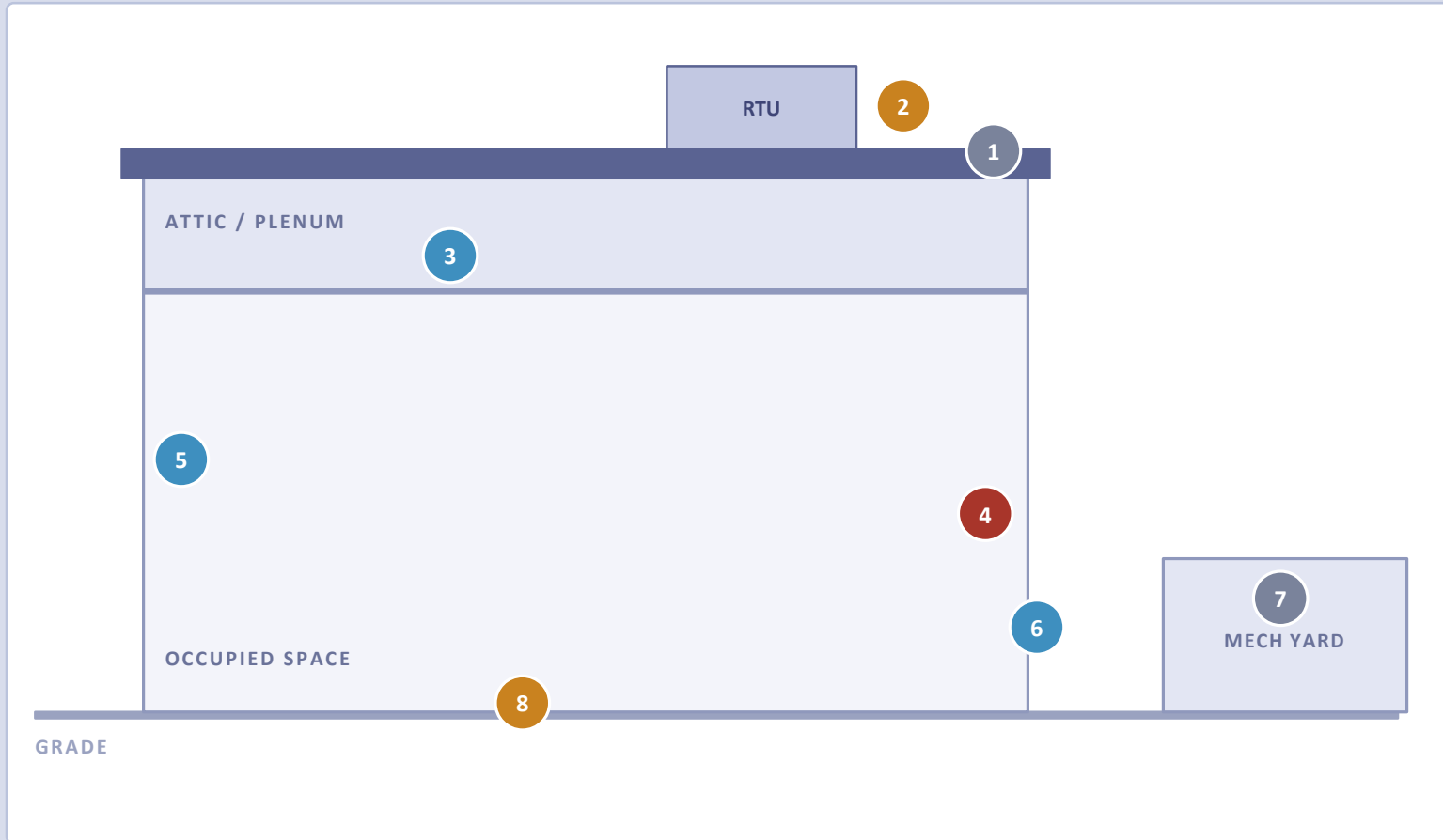
TIER 0

TIER 1

TIER 2

TIER 3

Common campus freeze failures



- 1 Roof drains and scuppers**
Ponding refreezes and adds load
- 2 Rooftop unit piping and coils**
Condensate, preheat, exposed runs
- 3 Attic domestic water**
Above the insulation, not below it, typically older buildings or out buildings
- 4 Fire Riser Room**
Check the Electric Unit Heater.
The most expensive line in the building
- 5 Exterior wall chases**
Restroom and kitchen walls
- 6 Hose bibbs and hydrants**
Hose left connected defeats them
- 7 Backflow preventer or above grade piping**
Exposed, above grade, damaged insulation
- 8 Slab and wall penetrations**
Cold air path straight to the pipe, Possible crawl spaces.

Takeaway: Every one of these eight is reachable by a person on a walk. None of them is behind drywall.

Roof, openings, and the spaces nobody enters

TIER 0

Complete by November 1

- **Clear roof drains, scuppers, and overflow paths**

Ponded water freezes, adds load, and backs up under flashing. Clear it in October, not the morning of.

- **Verify attic insulation is intact over every pipe run**

Displaced batts from cable pulls, IT work, and previous repairs are a recurring cause of frozen attic lines. This is a walk with a flashlight, not a guess.

- **Repair weatherstripping, thresholds, and broken glass**

Cold air reaching a chase is how an interior pipe freezes. Check automatic door operators and hold-opens that fail in cold.

TIER 1

Forecast below 32°F overnight

- **Confirm outside air dampers close and actuators work**

A damper stuck at 100 percent outside air at 20°F freezes a coil faster than you think. Verify physically, not from a graphic on a screen.

- **Walk the spaces nobody walks**

Press boxes, concession stands, field houses, ag barns, kilns, bus barns, natatorium chases, storage rooms. These are not on anyone's route, which is exactly why they freeze.

TIER 3

Below 20°F, multi-day, or grid stress

- **Nobody goes on the roof during or immediately after the event**

Ice on a membrane with no fall protection is how a winterization program produces a fatality. Roof work waits for thaw.

Takeaway: The envelope is a cold-air path. Close the path and most pipe problems disappear.

SECTION THREE

Plumbing and Domestic Water

Water is where the damage happens. Everything in this section comes down to two questions: can you stop the water and is the pipe warm enough or moving enough to survive the night.

TIER 0

TIER 1

TIER 2

TIER 3

Know your shutoffs before you need them

TIER 0

Complete by November 1

- **Locate, tag, and map every isolation valve**

Campus main, building main, and wing isolation. Put the location, the key or wrench required, and a photo on a one-page map. One copy in the shop, one in every campus office.

- **Operate every critical valve to confirm it actually works**

A valve that has not been turned in fifteen years does not close. Finding that out at 2 a.m. with water running is the worst possible time.

- **Stock the keys, wrenches, and curb box tools where crew can reach them**

A curb key locked in a supervisor's truck on vacation is the same as no curb key.

TIER 1

Forecast below 32°F overnight

- **Verify hot water recirculation pumps are running**

Moving water resists freezing. A failed recirc pump turns a hot water line into a still line on the coldest night of the year.

TIER 2

Below 28°F, or 12+ hours freezing

- **Brief the on-call crew on where the shutoffs are, verbally.**

Not a document, a conversation. The person walking at midnight should be able to say the locations from memory.

Takeaway: The difference between a wet floor and a destroyed wing is how fast somebody finds the valve.

Insulation, heat trace, and drip protocols

TIER 0**Complete by November 1****■ Inspect pipe insulation continuity on every exposed run**

Exterior walls, attics, roofs, crawl spaces, and slab penetrations. Insulation that stops six inches short of an elbow is why that elbow splits.

■ Energize and verify heat trace, do not assume it

Confirm the breaker is on, the controller is functional, and the circuit is drawing current. Measure it. Heat trace that has been dead for three winters looks identical to heat trace that works.

TIER 2**Below 28°F, or 12+ hours freezing****■ Start drip protocols on the fixtures you identified in advance**

Restroom and kitchen fixtures on exterior walls, ends of runs, and any fixture served by an attic line. Name the fixtures in writing before the event so crew is not guessing in the dark.

■ Say the trade-off out loud

A drip costs water and shows up on a bill. A burst costs a wing of the building and six months of displaced classrooms. Somebody in the business office should hear this before they see the water bill.

TIER 3**Below 20°F, multi-day, or grid stress****■ Stop drips only after temperatures hold above freezing**

The thaw is when splits reveal themselves. Ending a drip protocol at sunrise on day two is how buildings get flooded on day three.

Takeaway: Verify heat trace by measurement. Every other method is a guess that looks like a plan.

Drain-downs, kitchens, and athletic facilities

TIER 0

Complete by November 1

- **Check walk-in refrigeration condensers and exterior kitchen equipment**

Remote condensers sit outside. Ice machines, booster heaters, grease trap lines, and floor drain traps all have water in them.

- **Identify every structure that can be drained instead of heated**

Concession stands, field houses, press boxes, outdoor bottle fillers, and unused portables. Decide now, not during the event.

TIER 3

Below 20°F, multi-day, or grid stress

- **Drain unoccupied structures before hard freezes (and scheduled extended breaks)**

A drained building cannot flood. This is the only measure on the list that is close to absolute.

- **Add non-toxic propylene glycol antifreeze to every trap in each building you drain**

Antifreeze protects the trap in a freeze and evaporates slower during extended breaks to maintain the trap seal. When a trap dries up, you get sewer gas in the building. This step gets skipped constantly and the complaint arrives later.

- **Protect pool and natatorium chemical rooms and equipment pads**

Chemical feed lines, exposed pumps, and filter piping. Often in an unheated equipment room nobody has entered since August. Check emergency heat in all equipment rooms with piping.

Takeaway: If a building can be drained, drain it. That is the only measure that cannot fail.

SECTION FOUR

Fire protection

A frozen sprinkler main can be the most expensive failure on this list and last on your mind since Fire Marshal inspects it, but does he inspect the Emergency Heat? It combines water damage with a life safety system that is now out of service.

TIER 0

TIER 1

TIER 2

TIER 3

Wet systems, dry systems, and the fire pump room

Wet systems

Water in the pipe at all times

- Attic and concealed-space mains sit above the insulation, in the coldest air in the building (if attic spaces present in building).
- Canopy and covered walkway heads improperly extended off the wet main into unheated space are a common installation error.
- Unheated stairwells and entry vestibules with a single head are a common split point.
- Verify the riser room has working heat and stays above 40°F.

Dry systems

Air in the pipe, water held back at the valve

- Confirm the air compressor runs and holds pressure. A dry system with no air is a wet system.
- Drain every low point. Trapped water in a dry system is the whole failure mode.
- Verify dry valve trim heat and the heated enclosure around the riser.
- Know which of your systems are dry. Many crews do not, and it is written on the riser.

The alarm nobody answers

Low temperature and low air supervisory signals only help if the monitoring company reaches a person who will drive to the building. Test the call path before the season, at 2 a.m., on a weekend. Confirm FDC and hydrant caps, operating nuts, and clearance zones are ice-free and visible.

Takeaway: A frozen sprinkler system is a flood and a life safety outage at the same time.

SECTION FIVE

HVAC and Mechanical

Some campuses are on boilers and chilled water, others are on packaged units and heat pumps, some have a mixture.... The failure modes are different, so the checklist is different. Know which building you are standing in.

TIER 0

TIER 1

TIER 2

TIER 3

Hydronic campuses: boilers, chillers, towers

TIER 0

Complete by November 1

- **Test and document glycol concentration. Do not assume it**

Glycol gets diluted every time the system is filled after a repair. A loop that was 35 percent in 2019 may be 12 percent now, which protects nothing. Test it, record it, correct it.

- **Run the heating plant at full load before you need it**

Verify boiler staging, lead-lag, pump operation, and that both boilers actually fire. The second boiler may not have run since spring.

- **Clear combustion air intakes and exhaust terminations**

Ice and debris frozen to a sidewall termination shuts down a boiler on the coldest night. Protect condensate drains and neutralizer traps, which freeze and back up. Prevent premature shut-off of boilers.

TIER 2

Below 28°F, or 12+ hours freezing

- **Maintain circulation at low load**

A loop sitting still in an unoccupied building at 15°F outside is a loop that freezes. Keep pumps running even when there is no call for heat.

- **Protect idle chillers and cooling towers**

Basin heaters energized and verified, or the tower drained. Exposed condenser water piping insulated and heat traced. A cracked tower basin is a spring surprise with a long lead time.

Takeaway: Glycol concentration is the one number on this slide that gets assumed and should never be.

Packaged campuses: RTUs and Heat Pumps

TIER 0

Complete by November 1

- **Verify freezestat function and setpoint on every unit with a coil**

A freezestat that has been jumpered out lets the coil ice over unchecked, risking compressor damage. Check for jumpers. They are common and they are deliberate.

- **Test auxiliary and emergency heat on every heat pump**

Aux heat strips have not run since last February. Failed elements and open contactors are invisible until the day outdoor temperature drops below the balance point and the building will not hold temperature.

- **Check OA damper and economizer position, actuators, and low ambient lockouts, gas valves on roof**

OA damper and Economizers stuck open are common packaged-equipment freeze cause. Verify at the unit, not on the front end.

Ensure gas valves to gas heat units are not closed from maintenance. No gas, no heat!

TIER 1

Forecast below 32°F overnight

- **Confirm defrost cycles operate**

A heat pump that cannot defrost ices the outdoor coil solid and stops producing heat entirely, usually overnight.

- **Verify mechanical room and riser room unit heaters are working**

These rooms hold the pipes and the pumps. An unheated mechanical room in a hard freeze takes the whole building with it.

Takeaway: Auxiliary heat and freezestats fail silently. Both need a functional test, not a visual one.

Controls, setback, and alarms that reach a person

TIER 0

Complete by November 1

- **Do not deep-setback buildings with freeze-vulnerable piping**

Standard energy-saving setback strategy is a freeze strategy in the wrong weather. Hold 55°F minimum in occupied-type spaces, and never below 50°F anywhere water piping runs.

- **Review break and holiday schedules before every extended closure**

Most freeze damage happens in buildings that were unoccupied and on a holiday schedule nobody revisited.

- **Verify sensors read accurately before you trust what they say**

A space sensor reading 68°F in a room that is actually 41°F is worse than no sensor at all.

TIER 1

Forecast below 32°F overnight

- **Where a BAS exists: confirm low-temperature alarms route to a human**

An alarm that emails an address nobody monitors is decoration. Name the person, name the phone, and test it.

- **Where no BAS exists, or nobody watches it: walk routes replace alarms**

This is the honest answer for most campuses. A defined route, a defined frequency, and a defined person beats an unmonitored graphic every time.

Takeaway: An alarm that does not reach a person who will drive to the building is not a control, it is a record.

SECTION SIX

Before, During, and After

The plan is only as good as the three days around it. Who walks, who stays, who answers the phone, and what happens when the temperature comes back up and the splits reveal themselves.

TIER 0

TIER 1

TIER 2

TIER 3

The seventy-two hours that matter

T MINUS 72 HOURS

Decide and assign

- Call the tier from the forecast
- Assign the walk, by name, per campus
- Put vendors on notice
- Confirm fuel, keys, and ice melt are on site

T MINUS 24 HOURS

Walk and protect

- Complete the pre-event walk and sign the sheet
- Disconnect hoses, cover bibbs
- Start drips where called for
- Set controls, cancel deep setback

DURING THE EVENT

Rotate and watch

- Defined walk frequency, not "check on it"
- On-call person with authority to act
- Watch mechanical rooms and riser rooms
- Escalate early, not at 4 a.m.

THAW AND AFTER

Recover deliberately

- Thaw and repressurize slowly
- Inspect ceilings, attics, and concealed space
- Restore and verify fire systems
- Document everything before cleanup

Takeaway: More damage happens during the thaw than during the freeze. Do not stand down at sunrise.

Recovery and the paperwork that pays

STEP 1

Immediately following a freeze event

- **For systems that were drained, repressurize slowly and one system at a time**

Do not flip everything back on. A split line under full pressure floods faster than a split line being brought up gradually with somebody standing there watching.

- **Inspect for concealed leaks before anyone declares it over**

Ceiling tiles, attic decking, wall bases, and the rooms nobody entered. Water travels and it hides. A dry hallway means nothing.

- **Verify every fire protection system**

Confirm the system is in service and supervised, in writing. An unsupervised sprinkler system is an occupancy problem the next morning.

STEP 2

WHEN DAMAGE OCCURS - Documentation and lessons-learned

- **Photograph DAMAGE with timestamps before cleanup starts**

The cleanup destroys the evidence. Photos taken before the mop is the difference between a paid claim and a negotiated one.

- **Pull the signed pre-event checklists into the claim file**

This is the document that proves reasonable measures were taken. It is worth more than any other paper in the file.

- **Run an after-action review within two weeks, while it is fresh**

What failed, what was missing, who could not be reached. Every finding becomes a Tier 0 item on next year's November 1 list.

Takeaway: The checklist you signed before the freeze is the document that settles the claim after it.

What you should walk out with

Tiered trigger card

One laminated page per campus. Four tiers, the actions under each, posted in the shop and the campus office.

Shutoff valve map

Campus main, building main, wing isolation. Location, tool required, and a photo of each.

Pre-event walk checklist

Signed and returned per campus, per event. This is the claim document.

Escalation contact list

Who to call, in what order, with after-hours numbers that have been tested.

Vendor call list

Mechanical, plumbing, fire protection, roofing, restoration. Arranged before the season, not during.

Drip and drain-down list

Named fixtures and named structures, decided in advance so nobody is guessing in the dark.

Three things to do this week

- 1 Walk one campus and find the backflow preventer, the fire riser, and the building main.
- 2 Put a name next to each campus for the pre-event walk, and tell that person.
- 3 Set a calendar reminder for October 15 to run the Tier 0 list.

Checklist Download

Scan the QR code to get a checklist based on this presentation.



How do you track this now? Memory, physical checklist, are they saved somewhere? Would a Compliance Software be helpful to the districts?

Winterizing Your Campus — Pre-Event Walk Checklist

Check the forecast → find your tier → work that list. Tiers stack: at Tier 3, do everything in Tiers 0–2 as well. **Sign and return per campus, per event.**

0 Tier 0 — Complete by Nov 1

1 Tier 1 — Below 32°F overnight

2 Tier 2 — Below 28°F / 12+ hrs

3 Tier 3 — Below 20°F, multi-day

Campus: _____

Date/Event: _____

Tier called: _____

SITE AND GROUNDS

- ☐ **0** Insulate and drain the backflow preventer
- ☐ **0** Shut off and drain the irrigation mainline
- ☐ **0** Verify rain/freeze sensors are wired, not just mounted
- ☐ **0** Inspect tree limbs over roofs, walks, and power service
- ☐ **0** Clear site inlets, area drains, gutters, downspouts
- ☐ **0** Check portable skirting, underfloor insulation, and heat trace
- ☐ **1** Disconnect every hose from every bibb
- ☐ **1** Stage ice melt before the event, not after
- ☐ **1** Verify access to mechanical yards and fenced enclosures
- ☐ **2** Install insulated covers on exposed bibbs and hydrants
- ☐ **2** Drain out-buildings if possible, especially if not consistently used over cold months
- ☐ **2** Check fuel: Generators, fleet, grounds equipment, kitchen propane (watch idle equipment for old summer-blend fuel)

BUILDING ENVELOPE

- ☐ **0** Clear roof drains, scuppers, and overflow paths
- ☐ **0** Verify attic insulation is intact over every pipe run
- ☐ **0** Repair weatherstripping, thresholds, and broken glass
- ☐ **1** Confirm outside air dampers close and actuators work
- ☐ **1** Walk the spaces nobody walks (press boxes, field houses, ag barns, kilns, bus barns, chases)
- ☐ **3** SAFETY: Nobody on the roof during or right after the event

PLUMBING AND DOMESTIC WATER

- ☐ **0** Locate, tag, and map every isolation valve (campus/building main, wing isolation)
- ☐ **0** Operate every critical valve to confirm it actually works
- ☐ **0** Stock keys, wrenches, curb box tools where crew can reach them
- ☐ **0** Inspect pipe insulation continuity on every exposed run
- ☐ **0** Energize and verify heat trace by measurement, do not assume it
- ☐ **0** Check walk-in refrigeration condensers and exterior kitchen equipment
- ☐ **0** Identify every structure that can be drained instead of heated
- ☐ **1** Verify hot water recirculation pumps are running
- ☐ **2** Brief the on-call crew on shutoff locations, out loud
- ☐ **2** Start drip protocols on fixtures identified in advance
- ☐ **3** Stop drips only after temps hold above freezing
- ☐ **3** Drain unoccupied structures before hard freezes (and scheduled breaks)
- ☐ **3** Add non-toxic propylene glycol antifreeze to every trap in each building you drain
- ☐ **3** Protect pool/natatorium chemical rooms and equipment pads
- ☐ **3** Check emergency heat in all equipment rooms with piping

FIRE PROTECTION

- ☐ **0** Know which systems are wet vs. dry (it's written on the riser)
- ☐ **0** Wet: Confirm attic/concealed-space mains are fully insulated above them
- ☐ **0** Wet: Check canopy/covered walkway heads for improper wet-main extension into unheated space
- ☐ **0** Wet: Verify unheated stairwells/entry vestibules with a single head are protected
- ☐ **0** Dry: Confirm air compressor runs and holds pressure; drain every low point
- ☐ **0** Dry: Verify dry valve trim heat and heated riser enclosure
- ☐ **0** Verify riser room has working heat and stays above 40°F
- ☐ **0** Test the after-hours alarm call path before the season (2 a.m., weekend)
- ☐ **1** Confirm FDC and hydrant caps, operating nuts, and clearance zones are ice-free and visible

HVAC AND MECHANICAL

- ☐ 0 Hydronic: Test/document glycol concentration, do not assume it
- ☐ 0 Hydronic: Run heating plant at full load (staging, lead-lag, both boilers fire)
- ☐ 0 Hydronic: Prevent premature shut-off of boilers
- ☐ 0 Hydronic: Clear combustion air intakes and exhaust terminations
- ☐ 0 Packaged: Verify freezestat function/setpoint on every coil unit (check for jumpers)
- ☐ 0 Packaged: Test auxiliary/emergency heat on every heat pump
- ☐ 0 Packaged: Check OA damper/economizer min position, actuators, low-ambient lockouts
- ☐ 0 Packaged: Ensure gas valves to gas heat units are not closed from maintenance — no gas, no heat
- ☐ 0 Controls: Do not deep-setback freeze-vulnerable buildings (55°F min occupied / never below 50°F at piping)
- ☐ 0 Controls: Review break/holiday schedules before every extended closure
- ☐ 0 Controls: Verify sensors read accurately before you trust them
- ☐ 1 Packaged: Confirm defrost cycles operate
- ☐ 1 Packaged: Verify mechanical/riser room unit heaters are working
- ☐ 1 Controls: Where a BAS exists, confirm low-temp alarms route to a named human — test it
- ☐ 1 Controls: Where no BAS exists or nobody watches it, assign walk routes instead
- ☐ 2 Hydronic: Maintain circulation at low load (keep pumps running, even idle)
- ☐ 2 Hydronic: Protect idle chillers/cooling towers (basin heaters or drain the tower)

EVENT TIMELINE — BEFORE, DURING, AFTER

- ☐ T-72h: Call the tier from the forecast
- ☐ T-72h: Assign the walk, by name, per campus; name the on-call person with authority to act
- ☐ T-72h: Put vendors on notice; confirm fuel, keys, and ice melt are on site
- ☐ T-24h: Complete the pre-event walk and sign the sheet
- ☐ T-24h: Disconnect hoses, cover bibbs; start drips where called for
- ☐ T-24h: Set controls, cancel deep setback
- ☐ During: Maintain a defined walk frequency, not "check on it"; watch mechanical/riser rooms
- ☐ During: Escalate early, not at 4 a.m.
- ☐ Thaw: Repressurize slowly, one system at a time
- ☐ Thaw: Inspect for concealed leaks before anyone declares it over (ceilings, attic decking, wall bases)
- ☐ Thaw: Verify every fire protection system, in writing
- ☐ Thaw: Photograph any damage with timestamps before cleanup starts
- ☐ Thaw: Pull signed pre-event checklists into the claim file; run after-action review within two weeks

CONTACTS — PERSONNEL AND VENDORS

Personnel

Personnel	Role	Phone (after-hrs)

On-call lead, campus walk assignee, facilities director, superintendent designee. Test all after-hours numbers before the season.

Vendors

Vendor	Trade	Phone (after-hrs)

Mechanical, plumbing, fire protection, roofing, restoration. Test all after-hours numbers before the season.

Signature: _____ Print name: _____ Date: _____

Retain a signed copy in the campus office for record.