



City of San Antonio
Development Services Department
1901 S. ALAMO STREET, SAN ANTONIO TEXAS 78204
(210) 207-1111

COMMERCIAL REMODEL PERMIT APPLICATION

A Remodel permit application is appropriate for any type of alteration to an existing building that has, or had a certificate of occupancy (COO). The remodel permit is intended for the following:

- Any alteration to a building including structural work (cutting away of any wall, partition or portion thereof, and the removal or cutting of any structural beam or load bearing support).
- Changes to the means of egress (removal or change in any required means of egress or rearrangement of parts of a structure affecting the egress requirements).
- Changes to the exterior of a building.
- A remodel may include exterior Site Work which requires additional plans submitted.
- A Remodel may be used to upgrade an existing building with the intent to lease to a future tenant. In this case no COO issued, rather the permit will be closed out with a letter of certification. A “white box” is then created that requires the future tenant to either apply for a separate remodel permit or if no work is needed prior to occupancy, apply for an application for a certificate of occupancy.

A remodel does not include any of the following:

- An addition to a structure (increase in the square footage of a building or the number of floors). For an addition, see the [Commercial Building Permit Application](#).
- Finish work which does not require a permit under the 2015 International Building Code (such as painting, papering, tiling, carpeting, cabinets, counter tops and other similar work).
- A first time interior finish out of a new shell building. [Commercial Building Permit Application](#).
- Repair work to existing building systems. If work is proposed that only includes repair work then an over-the-counter repair permit may be more appropriate. See the [Commercial Repair Permit Application](#).
- If an alteration/remodel is undertaken that only involves Mechanical Electrical or Plumbing, individual MEP trade permits are all that are required unless the alteration requires changes to the structural aspects of the existing building (for example a new HVAC roof top units –added weight on the roof).

HISTORIC BUILDINGS

Not all historic buildings are on the city zoning map and therefore may not be flagged as historic by the building permitting software until a demolition permit is applied for. For a full or partial demolition of a building, or a remodel of an existing building, customers are advised to contact the Office of Historic Preservation. Phone numbers and e-mail addresses are at: <http://www.sanantonio.gov/historic/AboutUs/Staff.aspx>

In addition the customer is advised to check the City’s Office of Historic Preservation website as follows: <http://www.sanantonio.gov/historic>. In the main menu on the left, choose “Historic Sites.” From there, choose both “Historic Districts” and “Landmarks.” By choosing “Historic Districts”, a list of historic district names is available. Choosing any district name brings up an access to the map of the historic district boundaries. From there you may determine if a lot is in a historic district. If you select “Landmarks” under “Historic Sites”, you will find links at the bottom of the page to existing landmarks by name and by street. Reviewing the list of addresses will determine if a lot is a designated landmark. Direct links are at:

<http://www.sanantonio.gov/historic/historicsites/HistoricDistricts.aspx>
<http://www.sanantonio.gov/historic/historicsites/Landmarks.aspx>

If the building is Historic, then any work done on the building, or demolition of the building may need to go to the Historic Design Review Commission.

OBTAINING A CERTIFICATE OF OCCUPATION (COO)

When an owner or tenant obtains a remodel permit and any associated mechanical, electrical, or plumbing permits, unless told otherwise, DSD will assume that the original Certificate of Occupancy (COO) is valid and therefore **a new COO is not issued.** If the old COO is valid, an owner may obtain a reprinted COO with new owner name through a DBA name change rather than request a new COO and associated inspections. See [IB 189](#) and [IB126a](#) for more information.

In some cases a new COO may be required and issued; for example if there is a change of use of the building, a different occupancy classification, or an increase in occupant load. Where a new COO is required (or being asked for by the owner), full plans of the building are required with dimensions and use of each room/space and the entire building is subject to possible inspections based on the currently adopted International Existing Building Code.

Where the building is being prepared as a “white box” with no known future tenant, the remodel permit will be closed by a letter of completion. No certificate of occupancy will be issued. The future tenant will need to apply for a separate remodel permit to obtain a certificate of occupancy if further work is performed, or apply for a Certificate of Occupancy with additional information required for submittal if no work is needed.

TEXAS ACCESSIBILITY STANDARDS (TAS)

A Commercial Remodel Permit requires that construction plans be submitted for plan review prior to issuance of the permit. The plans may need to be stamped by an architect or engineer, registered in the State of Texas for institutional buildings, residential buildings and for any public building over \$50,000 in project costs where the alteration requires removal, relocation, or addition of walls or partitions or alteration or addition of an exit. In addition an architect and engineers are required for any of the following occupancies:

1. All group A (Assembly) – Theaters, restaurants, bars, churches, Stadiums, etc.
2. All group E (Educational) – Day cares, grades 1st - 12th, religious educational rooms, etc.
3. All group I (Institutional) – Care facilities, assisted living facilities, social rehabilitation facilities, etc.
4. Work in buildings and structures three stories or more high.
5. Work in buildings and structures 5,000 square feet or more in area.

It is the owner's responsibility to ensure compliance with the TAS regardless of construction cost.

1. Under the Administrative Rules of the Texas Department of Licensing and Regulation 16 Texas Administrative Code, Chapter 68, a privately funded building or facility that is defined as a "public accommodation" by Section 301, Americans with Disabilities Act of 1990 (42 U.S.C. Section 12181), and its subsequent amendments, and that is constructed, renovated, or modified on or after January 1, 1992 are subject to compliance with the Texas Accessibility Standards.
2. “Public accommodations” are defined in section 68.20 of the Texas Department of Licensing and Regulation Administrative Code <https://www.tdlr.texas.gov/ab/abrules.htm#r6820>
3. See Chapter 68 for exemptions and variance procedures.
4. For information about submitting construction documents for projects with an estimated construction cost of less than \$50,000, see Chapter 68.54. <https://www.tdlr.texas.gov/ab/abrules.htm#r6854>
5. **For information about the Texas Accessibility Standards scoping and building standards, see <https://www.tdlr.texas.gov/ab/abtas.htm>**

2015 INTERNATIONAL ENERGY CONSERVIATION CODE SUBMITTAL INFORMATION

A. Remodels that require complete 2015 IECC Submittals:

- Existing buildings/spaces currently un-conditioned being converted into conditioned space
- Existing buildings being “guttled” down to the structural elements and rebuilt

Use [IB 221](#) for information, with associated forms, plan review submittal and inspection requirements

B. Remodels that require partial 2015 IECC Submittals – COMChecks required only for applicable new systems:

Alterations – The overall intent of the 2015 IECC is to require an energy system to meet current codes where that system is being replaced as part of the alteration. Extensions of existing systems shall be treated as new systems without requiring the existing portion to be upgraded.

Depending on the systems, alterations of an energy system will require some compliance with new codes as described below:

Building Thermal Envelope

- New proposed insulation in walls ceiling requires compliance with the current code Sections C402.1 through C402.5. This includes insulation R-Values and/or U-Factors.,
- Where cavities in walls or ceilings are exposed during construction and the cavities are not already filled with insulation, the insulation shall be brought up to minimum code, or at a minimum the insulation increased by filling the cavity even if the resulting total insulation does not meet current code.
- Where insulation exists both above the roof deck and exists as continuous insulation below a roof deck, insulation need not be brought up to code unless the ceiling cavity is being exposed, even if the insulation above the roof desk is being replaced.
- Cool roofs – roofing materials meeting minimum roof reflectance is required when the roof is being replaced down to the deck. C402.3
- Air Barriers - installation of a new air barrier where the building has no air barrier is required where both the wall and ceiling insulation is replaced. Remodels that expose an existing air barrier shall repair any penetrations and damage.

Fenestration

- New Windows are required to meet Table C402.4 for U-Factor and Solar Heat Gain Coefficient
- Where new windows are being added to a building changing the percentage of windows in a wall, the alteration shall follow C503.3.2. Windows added to a building resulting in less than 30% window to wall area shall follow simple U-Factor and SHGC requirements. Windows added to a building resulting in a window to wall area from 30% to 40%, shall add daylight responsive controls for those local daylight zones (side-lighting). Windows added to a building where the percent windows to walls are over 40% shall submit an energy analysis under the Total Building Performance Path (C407).

Skylights

- Where new skylights are being added (non-mandatory) under the scope of work, they shall comply with Section C402.4 and electrical daylighting controls of Section C405.2.3. Skylight curbs shall be insulated.
- No skylights are required to be added to a building under a remodel permit, however if added as part of the project, they must meet section C402.4.1 for total allowable skylight area to roof area

HVAC, Hot Water Systems, Lighting, Power

- Any new MEP system shall meet the 2015 IECC requirements for new systems.
- Replacement of less than 50% of luminaires shall not require meeting the 2015 IECC.

CITY OF SAN ANTONIO
 1901 S. ALAMO STREET, TEXAS 78204 (210) 207- 1111
COMMERCIAL REMODEL PERMIT APPLICATION

(Applicant to complete all numbered spaces – Please Print)

SUBMIT REVIEW DOCUMENTS IN DUPLICATE

AP No.:	TDLR No.:	Date:	
1	Project Name:		
	Site Address:	Building No.:	Suite No.:
2	Legal Description	NCB:	Block: Lot(s):
3	Owner:		Phone: Fax:
	Address:		Email:
	City:	AC#	State: Zip Code:
4	Contractor:		Phone: Fax:
	Address:		Email:
	City:	Contr. ID#	State: Zip Code:
5	Architect/Designer:		Phone: Fax:
	Address:		Email:
	City:	AC#	State: Zip Code:
6	Structural Engineer:		Phone: Fax:
	Address:		Email:
	City:	AC#	State: Zip Code:
7	Contact Person:		Phone: Fax:
	Address:		Email:
	City:	AC#	State: Zip Code:

City of San Antonio

COMMERCIAL REMODEL PERMIT APPLICATION

8	Describe the Scope of Work:				
9	Pick 1 of the 4 Options for Obtaining a Certificate of Occupancy (COO) - Initial one option only				
	Existing COO which will be reused: There is <u>no change of existing use of the building, or no change of occupancy classification, or no increased amount of people allowed in the building.</u> The Old COO is still valid. You may obtain a DBA Name Change (reprint the old COO with new owner's name).				
	Existing COO – a new COO will be issued: There is a <u>change of existing use, or change in occupancy classification, or an increase in number of people using the building.</u> Will result in an automatic new COO issued with this permit and COO inspections will be part of your normal permit inspections.				
	No Existing COO: A new COO will be automatically issued with this permit. <u>All inspections will be added to cover all trades (mechanical, electrical and plumbing) through a Pro-Rated COO.</u>				
10	Current Use		Proposed Use		
	Current Occupancy group: Assembly Business (office etc.) Educational (thru 12th grade) Factory (Circle Applicable) High-Hazard Institutional Mercantile Residential Storage Utility Vacant				
	Proposed Occupancy group: Assembly Business (office etc.) Educational (thru 12th grade) Factory (Circle Applicable) High-Hazard Institutional Mercantile Residential Storage Utility White Box				
11	Square Footage of Work Area:		Total Square Footage of the Building:		
12	Is There Exterior Site Work included with the Project? (If Yes, Fill Out This Entire Section 12)			Yes	No
	Increase or Decrease in Impervious Cover (sq. ft.) (footprint of the building(s), canopies, concrete, asphalt, pavers, etc as a result of this project.) (indicate if a decrease)				
	Is this project in the River Improvement Overlay (RIO) district?			Yes	No
	Does the project (this permit set) include Low Impact Development (LID) components?			Yes	No
13	Is there an active, abandoned, or plugged water well on the property?			Yes	No
14	Is the project within an EAA Subchapter 713 Regulated Zone? EAA Map of Subchapter 713 Regulated Zones			Yes	No
	If Yes, will the site store and handle regulated substances as defined by EAA Rule 713? EAA Rules and Regulations			Yes	No
	If Yes, will substances be stored in containers greater than 55 gallons?			Yes	No

City of San Antonio COMMERCIAL REMODEL PERMIT APPLICATION

15	Have you had a Preliminary Plan Review?	Yes	No	Number:	Date:						
16	Will ALCOHOLIC beverages be sold on premises?	Yes	No	Will FOOD be sold							
17	Is there an Existing Sprinkler System ?	Yes	No	Is there an Existing Fire Alarm System ?							
18	Construction Type (IBC) of the existing building: (Circle One)	I A	I B	II A	II B	III A	III B	IV	V A	V B	
19	Circle the work if any of the following trade work is being performed: <div style="display: flex; justify-content: space-around; text-align: center;"> Mechanical Electrical Plumbing Fire Alarm Sprinkler System </div>										
21	Project Valuation (all materials, labor and profit): \$										
21	Is unconditioned space now being converted to heated or cooled space?	Yes	No	Is the building being demolished down to the structural framing?				Yes	No		
21	For "Yes" to one of the above, indicate the energy code proposed (circle one):	IECC Prescriptive Path		IECC Building Performance Path		ASHRAE 90.1 Prescriptive		ASHRAE 90.1 Energy Cost Budget			
NOTICE											
22	<p>Separate permits are required for mechanical, electrical, plumbing, and sidewalks/approaches/curb cuts.</p> <p><u>Expiration of Plan Review and Issued Permits</u></p> <p>Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the Building Official. Permits issued shall expire after 180 days if work is not started or if the work is abandoned for a period of 180 days. – 2015 IBC</p> <p><i>I hereby certify that I have read and examined this application and know the same to be true and correct. I acknowledge that my project may be subject to the requirements of the Fair Housing Act (FHA), the Americans with Disabilities Act (ADA), the Texas Accessibility Standards (TAS), and section 504 of the Rehabilitation Act of 1973. It is my responsibility to ensure my project complies with those requirements. I affirm that for information I will contact: 1-800-949-4232 for ADA, 1-800-767-7468 for FHA, or 1-800-252-8026 for TAS.</i></p> <p>Permits are property of the project owner, not the applicant. By signing below as the applicant, you are acknowledging that this permit is the property of the owner and can/will be transferred at the owner's request.</p>										
23	Applicant Signature:							Date:			
24	Owner Signature (OWNER REQUIRED or Authorized Agent signature below) *:							Date:			
25	Owner Printed Name :										

* Owner's Authorized Agent:

I CERTIFY THAT I AM AN AGENT OF:

Owner/Company/Partnership

Authorized Agent Signature



City of San Antonio

Development Services Department

1901 S. ALAMO STREET, TEXAS 78204 (210) 207-1111

COMMERCIAL REMODEL CHECKLIST

Plan Document Checklist

Please clearly distinguish between existing conditions and proposed work.
The plans must be legible, reproducible, black and white.

General Requirements

- Texas Department of Licensing and Regulation AB# (Architectural/ Barriers No. is required if valuation stated on the application is equal to or exceeds \$50,000). Applicable Texas Accessibility Standards for all public accommodations is required regardless of valuation stated on the application see <https://www.tdlr.texas.gov/ab/abtas.htm>
- An [asbestos survey](#). Asbestos abatement reports are not acceptable.
- Distance surveys and zoning compliance letters for sale of alcohol, Bed and Breakfast, Community Home for Disabled Persons, Head Shop, Transitional Home, Sexually Oriented Business, and Live Entertainment.
- [Traffic Impact Analysis](#) (TIA) Worksheet or proof of previous TIA Study (Required for occupiable structures)
- Check with the [Department of Historic Preservation](#) to see if the building is designated historic.

TWO COPIES OF ALL PLANS:

Architectural (Some items may not be required for a small project)

- General notes including information on the building's construction type, the number of stories, sprinklering and any information on the building's emergency systems, if any, such as smoke detector coverage, pressurization, smoke control or generators.
- Code Summary Floor Plans (may be on main plan or a separate full floor diagram plan) clearly showing fire wall types and fire-rating (i.e., area separations, occupancy separations, corridors, exits enclosures, shafts, etc.), uses of rooms/areas and occupancy classifications, smoke detectors, egress paths from the altered area to the exterior of the building with exit signs and egress lighting
- Calculations of the Occupant Load, in graphical or tabular form, showing the number of occupants to be accommodated on each floor, and in all rooms and spaces if a new COO is required or requested. See 2015 International Building Code Section 107.2.3
- Floor Plans of the proposed alterations, fully dimensioned and labeled, including existing and proposed walls, walls to be removed, doors with swing direction, windows, stairs, plumbing fixtures, accessibility clearances in compliance with Texas Accessibility Standards, uses of rooms/areas, fire-rating of walls
- Enlarged details of new walls, floor and ceiling construction and attachment details
- Overall plan of the building, showing all occupancy classifications (may be on main plan or a separate full floor diagram plan)
- Reflected ceiling plan(s)
- Square footage information on the tenant space
- Fully dimensioned floor plans (including existing and proposed walls, rated construction, corridors and stairs) for each floor affected
- Construction information on any new walls, sections showing floor and ceiling construction and attachments.

- Complete information on door sizes and locations and hardware and door rating schedules for all doors affected
- Use of each room
- Egress path, showing the exit route, exit signs and extent of required egress lighting, to the exterior of the building (may be on main plan or a separate full floor diagram plan)
- Provide the contact information for the Registered Design Professional in Responsible Charge RDPiRC, and List of Special Inspections if required – See [Information Bulletin 132](#)

Site Plan (if applicable)

- Legal description of the property (matching latest recorded plat representation of the land)
- Address (city issued)
- North arrow indicated on plan
- Bearings of all property lines
- Location of all recorded easement(s) on the property
- Location of the public right-of-way adjacent to the property
- Plan showing dimensions for all existing and proposed sidewalks, driveways, approaches, paved areas, retaining walls, streets, curbs, and gutters
- Layout and design of the parking areas, including spaces for the disabled and the ADA assessable route from the building to a public sidewalk. Refer to Section 4.6 of the Texas Accessibility Standards

Fire (if applicable)

- Complete Occupancy Classification Worksheet for warehouses, large storage areas, manufacturing, hazardous materials storage or use, etc. See [IB 192a Occupancy Classification Instructions for Warehousing, Manufacturing, and Hazardous Materials](#), and also refer to [IB 192b - FAQs and Definitions relating to Occupancy Classification Letters \(a.k.a. “Commodities Letters”\) for Storage, Retail, Warehouse, Manufacturing and/or Hazardous Materials](#)
- City approved smoke management and/or fire protection/life safety reports where required (high rise, atria, smoke protected assembly seating, covered mall buildings, etc.)
- For medical and dental facilities, a letter from physician or dentist, on letterhead, indicating patient/staff load and medical gas storage types, hazardous material classification, maximum quantities in use and in storage. Refer to [IB 175 Medical Gas Form](#).

Mechanical (if applicable)

- Ventilation information for all normally occupied spaces (information to be provided in CFMs)
- HVAC equipment and schedules: Show locations, type, capacity, energy efficiency, and weight/support of all heating, ventilation and air conditioning (HVAC) equipment
- Rated Enclosures: Show or specify wall construction and opening protection where rated enclosures are required (heaters, boilers, etc., over 400,000 BTU; air conditioners over 100 HP, etc.).
- Special Equipment: Show special equipment such as kitchen hoods, garage ventilation, paint booth exhaust, automatic fire suppression, etc
- Penetrations of Rated Assemblies: Show method of opening protection and note referenced listing or refer to drawings containing same information.
- Special Requirement: Show appurtenances and required details such as flue vent type and size, expansion tanks, blow down systems, protection devices, means for combustion air and special use equipment Air Distribution System: Show all duct runs, fire/smoke dampers where applicable, sheet metal gauge thickness for medium and high velocity systems, type and class of non-metallic duct, etc
- Mechanical Energy Compliance for NEW Mechanical Equipment
<https://energycode.pnl.gov/COMcheckWeb/index.html>

Electrical (if applicable)

- Riser Diagram: The riser diagram should be a complete and comprehensive one-line diagram, including all service equipment, panels, transformers, generators, and fire pumps. The riser should also include all conductor sizes, overcurrent protection sizes, conduit sizes, and ground fault protection at the service if applicable
- Grounding Detail: The grounding detail can be incorporated in the riser or detailed separately; either format should include all conductor sizes, ground rod size, and location of bond. As a minimum the grounding electrode system shall consist of a concrete encased electrode, cold water bond, structural steel bond and grounding electrode. All methods of grounding/bonding should be sized and installed as per NEC article 250
- Interior Electrical Layout: The power plan should include the locations, circuiting, and wiring methods, of all electrical equipment such as panels, transformers, disconnects, elevator equipment, receptacles, etc. The lighting plan should include the location of all fixtures and switches or other method of control (occupancy sensor, contactor, photo cell, time clock, etc.). All 2015 IECC requirements such as bi-level switching, occupancy sensors, master switches, etc... will be required where applicable
- Load Analysis: The load analysis should be calculated as per NEC article 220, and will need to include and indicate any existing load to assure adequate capacity of a common service, panel, load center, etc...
- Panel Schedules: The panel schedules should include frame sizes, main lug or main breaker, feeder size, number of circuits, all overcurrent protection sizes (including main), NEMA classification of enclosure, and indication of any arc fault, ground fault, or shunt trip type breakers.
- Fixture Schedule: The fixture schedule should include a fixture description, number of lamps, maximum lamp wattage, installed lamp wattage, and number of fixtures
- Lighting Energy Compliance for NEW Interior Lighting Designs
<https://energycode.pnl.gov/COMcheckWeb/index.html>

Plumbing (if applicable)

- Plumbing Fixtures: Show fixture numbers and locations. Number of fixtures is based on the Occupant Load of the building. Include water closets, urinals, lavatories and drinking fountains
- Building Drain System: Show the under-floor system of the drain waste and soil piping, indicating pipe sizes and slope
- Plumbing Riser and/or Isometric: Provide diagram of installation for waste, vent, and water piping for multiple fixture installations
- Building Utilities: Show the sanitary building sewer, storm sewer system, water service, gas service and all connections to the public utilities
- Materials: Indicate all piping materials
- Water System: Provide known water pressure and supply pipe sizes and calculations of water system, water heater data, and hot water system and accessories (expansion tank, vacuum relief, safety devices, etc.), backflow prevention requirements, pressure reducing valves, etc
- Venting System: Show pipe sizes, size of vent through the roof and connection to building drains
- Special Requirements: Show all required appurtenances, such as grease interceptors, sump pumps, sewage ejectors, sample ports, backflow preventers, backflow valves, and special fixtures
- Gas Piping System Diagram: Provide schematic diagram of gas piping system Including system operating pressure. Developed lengths, gas outlets with stated demand in CFH
-

Drainage/Stormwater

- Cost Estimate (signed by contractor) & Structure Appraised Value
- [Elevation Certificate](#)

Health Department (if applicable)

For any Restaurant, Fast Food, Grocery Store, Bar, Liquor store, Bingo Parlor, Bowling Alley, Convenience Store, Child Care Facility, School (public or private), Swimming Pool, Paint and Body Shop, Hotel or Motel, or any type of retail establishment that sells or serves food or drinks whether open, or pre-packaged or pre-bottled.

- Finish schedules (floors, walls, ceilings and lighting)
- Utensil Washing Sink: All food establishments in which food is prepared (including coffee or beverages) or in which multi-service kitchen utensils are used shall have a minimum three-compartment sink with two integral drainboards, on each side. The sink compartments and drainboards shall be large enough to accommodate the largest utensil used.
- Liquor service or tavern sinks: A separate handsink is required. An approved glass washing machine with a rinse sink may be substitute for the compartment sink
- Dishwashing Machines: All automatic dish machines shall be installed and operated in accordance with code. All spray type dish machines, which are designed, for a hot water sanitizing rinse shall be provided with a booster heater, or be connected to an approved recirculation water system which is capable of maintaining the rinse water at not less than 180° F.
- Lavatories and Handwashing sinks: Handwashing facilities shall be provided within or adjacent to toilet rooms and shall be equipped with an adequate supply of hot and cold running water delivered under pressure through a mixing valve. An adequate number of handwashing cleanser and single-use sanitary towels, or hot-air blowers, shall be provided in wall-mounted dispensers at all handwashing facilities. Handwashing facilities shall be provided within each food preparation area, waitress station, and warewashing areas
- storage of cleaning equipment and supplies, such as mops, buckets, brooms, cleaners and waxes; and shall be equipped with at least one of the following, to be used for general cleaning purposes and for the disposal of mop bucket wastes and other liquid wastes:
 - 1. A one-compartment, non-porous janitorial sink/mop sink (stainless steel, porcelain or fiberglass), or
 - 2. A slab, basin, or floor constructed of concrete or equivalent material, cubed and sloped to a drain. Such facilities shall be connected to approved sewerage, and provided with hot and cold running water, and protected with a backflow device
- Compliance with the [smoking ordinance](#)
- Dumpster Enclosure: If an enclosure for trash cans and /or dumpster is to be utilized as a cleaning facility, it must be provided with hot and cold water. It must be curbed and sloped to drain into a sanitary sewer through a grease trap